

December 15, 2017

The Honorable Paul Torkelson, Chair  
House Transportation Finance Committee  
381 State Office Building  
Saint Paul, MN 55155

The Honorable Scott Newman, Chair  
Senate Transportation Finance & Policy Committee  
3105 Minnesota Senate Building  
Saint Paul, MN 55155

The Honorable Linda Runbeck, Chair  
House Transportation & Regional Governance Policy  
Committee  
417 State Office Building  
Saint Paul, MN 55155

The Honorable Scott Dibble  
Ranking Minority Member  
Senate Transportation Finance & Policy Committee  
2213 Minnesota Senate Building  
Saint Paul, MN 55155

The Honorable Frank Hornstein, DFL Lead  
House Transportation Policy & Finance Committee  
243 State Office Building  
Saint Paul, MN 55155

The Honorable Connie Bernardy, DFL Lead  
House Transportation & Regional Governance  
Policy Committee  
253 State Office Building  
Saint Paul, MN 55155

RE: 2017 Major Highway Projects, Trunk Highway Fund Expenditures, and Efficiencies report

Dear Legislators:

The Minnesota Department of Transportation is pleased to present the annual report to the legislature on major highway projects, trunk highway fund expenditures and efficiencies.

As required by [Minnesota Statute 174.56](#), the report details the projects that are either under construction, programmed for construction, or planned for construction within the next 15 years. The report includes the status of major highway projects around the state, an environmental mitigation cost comparison for representative projects and trunk highway fund expenditures.

Please let me know if you have questions. You can also contact Mark Gieseke at [mark.gieseke@state.mn.us](mailto:mark.gieseke@state.mn.us) or 651-366-3770.

Sincerely,



Charles A. Zelle  
Commissioner

# Major Highway Projects, Trunk Highway Fund Expenditures and Efficiencies Report

December 2017



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You may also send an email to [ADArequest.dot@state.mn.us](mailto:ADArequest.dot@state.mn.us)

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# Legislative Request

This report was completed to comply with [Minnesota Statute 174.56](#).

## **174.56 Report on Major Highway Projects, Trunk Highway Fund Expenditures, and Efficiencies.**

### **Subdivision 1. Report required.**

(a) The commissioner of transportation shall submit a report by December 15 of each year on (1) the status of major highway projects completed during the previous two years or under construction or planned during the year of the report and for the ensuing 15 years, and (2) trunk highway fund expenditures, and (3) beginning with the report due in 2016, efficiencies achieved during the previous two fiscal years.

(b) For purposes of this section, a "major highway project" is a highway project that has a total cost for all segments that the commissioner estimates at the time of the report to be at least (1) \$15,000,000 in the metropolitan highway construction district, or (2) \$5,000,000 in any nonmetropolitan highway construction district.

### **Subd. 2. Report contents; major highway projects.**

For each major highway project the report must include:

- (1) a description of the project sufficient to specify its scope and location;
- (2) a history of the project, including, but not limited to, previous official actions by the department or the appropriate area transportation partnership, or both, the date on which the project was first included in the state transportation improvement plan, the cost of the project at that time, the planning estimate for the project, the engineer's estimate, the award price, the final cost as of six months after substantial completion, including any supplemental agreements and cost overruns or cost savings, the dates of environmental approval, the dates of municipal approval, the date of final geometric layout, and the date of establishment of any construction limits;
- (3) the project's priority listing or rank within its construction district, if any, as well as the reasons for that listing or rank, the criteria used in prioritization or rank, any changes in that prioritization or rank since the project was first included in a department work plan, and the reasons for those changes;
- (4) past and potential future reasons for delay in letting or completing the project, details of all project cost changes that exceed \$500,000, and specific modifications to the overall program that are made as a result of delays and project cost changes;
- (5) two representative trunk highway construction projects, one each from the department's metropolitan district and from greater Minnesota, and for each project report the cost of environmental mitigation and compliance; and
- (6) the annual budget for products and services for each Department of Transportation district and office, with comparison to actual spending and including measures of productivity for the previous fiscal year.

### **Subd. 2a. Report contents; trunk highway fund expenditures.**

The commissioner shall include in the report information on the total expenditures from the trunk highway fund during the previous fiscal year, for each Department of Transportation district, in the following categories: road construction; planning; design and engineering; labor; compliance with environmental regulations; administration; acquisition of right-of-way, including costs for attorney fees and other compensation for property owners; litigation costs, including payment of claims, settlements, and judgments; maintenance; and road operations.

### **Subd. 3. Department resources.**

The commissioner shall prepare and submit the report with existing department staff and resources.

### *Report cost*

The cost of preparing the report elements required by Minn. Stat. 174.56 is approximately \$65,000.

*The costs reported for the 2017 Major Highway Projects, Trunk Highway Expenditures, and Efficiencies report includes the costs to gather the data needed to report on the budget by products and services and productivity measures.*

# Purpose and Scope of the Report

## Introduction

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The first legislative report on Major Highway Projects was delivered by the Minnesota Department of Transportation to the legislature in January 2009.

The Major Highway Projects, Trunk Highway Fund Expenditures and Efficiencies report, or MHPR, provides a snapshot of MnDOT's programming and delivery for all large construction projects meeting the cost thresholds laid out in statute. The scope of the report and the information it contains are meant to inform the reader about MnDOT's business of planning, building, operation and maintenance of Minnesota's transportation system.

This is one of MnDOT's most comprehensive reports. The purpose of the report is to provide the reader with information about major projects, financial management, budgeting by products and services and efficiencies achieved. The report breaks down, in high-level detail, various parts of a major project. This is consistent with the agency's focus on delivering high quality projects on time and within budget.

Some of the details reported about major projects include:

- location and scope
- funding
- cost savings/overruns
- environmental costs
- delays
- project history
- cost estimates

Together, this information provides the 2017 picture of MnDOT's performance in planning, building, operating and maintaining a safe, accessible, efficient and reliable multimodal transportation system that connects people to destinations and markets throughout the state, regionally and around the world.

The report is organized into these sections:

- Trunk highway fund expenditures
- Environmental mitigation and compliance costs
- Products and services budget expenditures report
- Productivity measures
- Efficiencies
- Major highway project summary sheets

## Summary of Report Contents

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### Major Highway Projects

This section of the report identifies major projects on the state trunk highway system, which includes the interstate and national highway systems. Per [Minnesota Statutes 174.56](#), this report includes projects with cost estimates equal to or in excess of \$15 million in the Twin Cities Metro District and with cost estimates equal to or in excess of \$5 million in Greater Minnesota.

This report includes information on projects that meet the total project cost estimate criteria and are either under construction, programmed or planned within the next 15 years. For each project completed in the past two fiscal years (2016-2017) or identified for construction in the next four years (2018-2021), a project summary is included that provides detailed information on project location, purpose, scope, schedule and cost. Each project planned for construction in 2022-2032 is included in Appendix D and contains the basic information on project location, description, schedule and preliminary estimated cost.

All the projects are arranged by MnDOT districts. A district map highlighting the locations of the projects within the area and a list of projects precede the project summary pages for each district. The information provided in this report is current as of November 2017.

## **Environmental Mitigation and Compliance Costs**

To comply with the legislative requirement in subdivision 2, clause (5), the cost of environmental mitigation and compliance was analyzed for two representative projects.

1. The Metro district project on Interstate 35E in Little Canada, Vadnais Heights, White Bear Lake and White Bear Lake Township was highlighted because it represents some of the types of mitigation that are commonly part of projects in Minnesota's largest metropolitan area.
2. The Highway 23 from Becks Road to Interstate 35 was chosen because it represents the types of environmental mitigation involved in an urban/rural combination corridor in Greater Minnesota.

## **Trunk Highway Fund Expenditures**

Fiscal year 2017 expenditure information is provided for each of the categories specified in the statute.

## **Products and Services Budget**

MnDOT developed a product and service framework that organizes and describes its products and services. The expenses and budgets provided in this report, by products and services, represent the department's annual budget for fiscal year 2017, as appropriated. It also includes expenses for services that may have been rendered in fiscal year 2016, but due to processing time would have been paid in fiscal year 2017.

Key concepts to remember when reviewing this section include:

- Timing differences between the two years of a biennium cause variances that would not be present if the report was prepared on a biennial basis. For example, carry-over from the first year of the biennium to the second year impacts the data for the second year.
- Some spending may not match budgets exactly because funds may have been encumbered in one year and expended in another.
- Uncommitted and carry-over budgets may seem to exhibit spending in excess of the total budget; however, this spending occurs within a biennium and is allowed by statute.
- The 2016 budget values were based on previous fiscal products and services analysis.

## Productivity Measures

Productivity measures are an effort to identify, create, examine and document current levels of productivity within MnDOT. This project reports measures of MnDOT productivity for the most recent 10 years of data (where available).

Performance measures are not new at MnDOT. Traditional performance measures used by MnDOT are measures of product and service delivery effectiveness. Productivity measures help the department enhance financial effectiveness and are the next step to evaluate how efficiently MnDOT's products and services are delivered.

The report includes the following measures:

- Bridges:
  - Inspection cost per square foot of deck area
  - Maintenance cost per square foot of deck area
- Pavement: Cost per roadway mile-year added
- Snow and ice: Cost per plow mile driven
- Pavement markings: Cost per mile striped
- Transit: MnDOT administrative cost per transit passenger trip
- Freight: MnDOT cost per oversize/overweight permit issued
- Program Planning and Delivery to construction expenditure ratio

The background for each productivity measure is presented along with data through the previous 10 years where possible. Each measure includes a discussion about why the measure presented is an effective measure of productivity and lists major influencing factors.

Two of the eight productivity measures show the inflation-adjusted unit costs declining slightly. Specifically, pavement markings cost per mile striped and cost per oversize/overweight permit issued all show a slight decline in inflation-adjusted unit costs over the analysis period. Three of the eight measures show an overall flat trend. Specifically, the bridge maintenance cost per square foot of bridge deck area, cost per plow-mile driven, and MnDOT administrative cost per transit trip all remained relatively flat over the last ten years. The cost per additional roadway mile-year added shows a slight increase over the analysis period while the bridge inspection cost per square foot of deck area appears to have stabilized over the last nine years following a spike in 2008. A trend line was not applied to the program, planning and delivery to construction expenditure ratio measure as there are just four three-year rolling average data points available at this time.

## Efficiencies

MnDOT consistently aims to be a good steward of public funds. Starting in 2015, the department decided to take a more targeted approach to identify and quantify these efficiencies, while looking for additional best practices and improvements. In FY 2017, MnDOT identified an estimated 83 million in savings from new and revised practices deployed across the organization. The majority of these efficiencies identified in FY 2017 came from construction program delivery and project development. Savings identified in the analysis led to program and project costs that were lower than if the efficient strategies had not been implemented.

# Major Highway Projects Summary

This annual report identifies major projects constructed within the past two years, and all major projects programmed or planned for construction on the state trunk highway system over the next 15 years, including the interstate and national highway systems. As directed in [Minnesota Statutes 174.56](#), this report includes projects with cost estimates equal to or in excess of \$15 million in the Metro District and projects with cost estimates equal to or in excess of \$5 million in Greater Minnesota. This report includes 559 projects that met the statutory cost threshold. The information provided in this report is current as of November 2017.

*Table 1: Projects included in 2017 Major Highway Projects report*

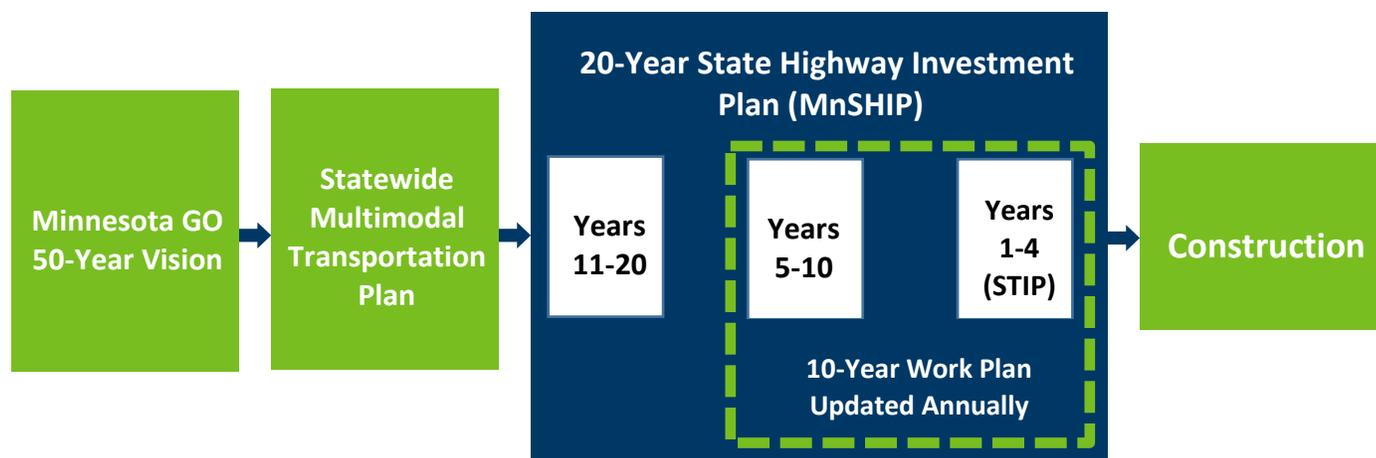
MnDOT District	Number of projects completed, under construction or listed in the STIP	Projects in years 2021-2032	Total Projects
1	38	37	75
2	24	31	55
3	33	48	81
4	31	27	58
6	44	47	91
7	49	35	84
8	15	20	35
Metro	35	45	80
<b>TOTAL</b>	<b>269</b>	<b>290</b>	<b>559</b>

Of the 559 projects reported this year, 80 are in the Twin Cities metro area and 479 are in Greater Minnesota. Projects vary in type, and include pavement preservation, bridge replacement and rehabilitation and mobility projects based on the priorities established in the [MnDOT’s 20-year State Highway Investment Plan, also known as MnSHIP](#).

## State Highway Investment Planning Process

[MnSHIP](#) is an important link between the guiding principles in the [Minnesota GO 50-Year Vision](#), the strategies in the [Statewide Multimodal Transportation Plan](#) and the actual capital improvements made to the state highway system. MnSHIP sets a “fiscally constrained” framework (that is, using only forecasted funding) for future capital improvements by identifying investment needs and priorities. This plan will serve as the framework for statewide investment on trunk highways for the next year before a new 20-year investment plan is produced. The investment levels identified in MnSHIP are being adhered to and MnDOT is on track to deliver on the fiscally constrained decisions from the plan.

Figure 1: Planning mechanisms and plans



MnSHIP covers three planning periods: years 1-4, years 5-10 and years 11-20. Projects identified for years 1-4 (FY 2018-21) are those listed in the [2018-2021 Statewide Transportation Improvement Program, also known as the STIP](#). MnDOT intends to deliver these projects during the next four years, although the programmed year of construction may be adjusted if actual revenues increase or decrease.

Investments identified for years 5-10 (FY 2022-27) include general funding levels for certain improvement categories (e.g., pavement preservation, traveler safety), and construction cost estimates for several specific projects within the improvement categories. These projects and their cost estimates should be considered preliminary, as revenue forecasts are uncertain.

Specific projects are not identified for years 11-20 (FY 2028-36); instead, MnSHIP has set broad investment priorities associated with funding allocations, which focus primarily on preserving the transportation assets MnDOT currently owns. Such elements include, but are not limited to:

- Pavement within MnDOT right of way
- Bridges
- Bike and pedestrian facilities
- Drainage structures
- Barriers, guardrails and fences
- Lighting and intelligent transportation system features
- Signs
- Noise walls

Investment priorities may change as a result of system performance conditions, legislative initiatives or federal funding requirements related to the MAP-21 and the FAST Act transportation programs.

MnDOT began the process by:

- Reviewing current investment priorities, asset conditions and other system needs
- Projecting the amount of federal and state funds that will be available for investment on the state highway system during the next 20 years
- Reviewing agency policy and federal and state transportation laws
- Identifying emerging significant risks that may affect investment priorities

Next, MnDOT established a range of potential investment levels for nine categories of highway investment priorities. These investment levels were combined into example investment scenarios to solicit feedback from the public. For investment direction for the 20-year plan, MnDOT considered stakeholder input, legislative direction, federal requirements and system-wide risks and outcomes to develop a final mix of investment priorities. This investment direction guided statewide and district investment goals. These goals are achieved by districts developing a schedule of projects that comprise their investment programs and are designed to make progress towards these goals.

## **Project Selection**

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MnDOT selects projects through different planning and programming processes all designed to address performance-based needs and achieve key objectives on the trunk highway system. These processes are the methods used by MnDOT to decide how to use authorized federal and state funds and revenue from the sale of trunk highway bonds. The primary framework for project selection is outlined below.

### **10-year Work Plan**

The existing investment plan known as MnSHIP created two programs to guide project selection at a state and regional level for the next 10 years. They are the Statewide Performance Program and the regional District Risk Management Program. The purpose of establishing these two programs is to ensure the department efficiently and effectively works toward common statewide goals. These goals consist of meeting Governmental Accounting Standards Board thresholds for pavements and bridges, and meeting the performance requirements started in Moving Ahead for Progress in the 21st Century Act, or MAP-21, and continued in the more recent passage of the Fixing America's Surface Transportation Act, or FAST Act, while simultaneously maintaining regional flexibility to address unique risks and circumstances at the district level.

### **Statewide Performance Program**

MAP-21, the previous federal transportation bill, placed greater emphasis on National Highway System performance and required MnDOT to make progress toward national performance goal areas, including those related to asset condition, safety and congestion. The greater emphasis on the NHS was continued in the FAST Act. If MnDOT fails to adequately progress towards the national goals, some federal funding flexibility is at risk. Further, an analysis highlighted the expectation that MnDOT maintain NHS routes in a state of good repair. In response, MnDOT developed the Statewide Performance Program to ensure that federal and state performance targets are met on the NHS and that the condition of these routes meets public and MnDOT expectations.

### **District Risk Management Program**

The Statewide Performance Program focuses funding on addressing key performance targets on National Highway System routes, while the District Risk Management Plan, or DRMP, focuses funding on other non-NHS highway needs on all state highways. The majority of the program supports pavement and bridge rehabilitation or replacement projects. The DRMP project selection process is structured to give districts the flexibility to address their greatest regional and local risks. Districts are also able to make additional investments on the NHS system if the proposed project is in response to a high risk issue.

In the DRMP, each MnDOT district is responsible for selecting projects that mitigate its highest risks in the areas of asset management, traveler safety, critical connections and projects, which are a regional and community improvement priority. MnDOT distributes different levels of funding to the districts for this program based on a

revenue distribution method that accounts for various system factors. MnDOT districts collaborate with area transportation partnerships, metropolitan planning organizations and other key partners to select projects.

MnSHIP directs 45 percent of MnDOT's annual revenues toward DRMP projects or approximately \$337 million per year, not including the cost of delivering those projects, such as right of way acquisition, consulting services, cost overruns and supplemental agreements. The DRMP's share of MnDOT's annual program may vary in the future depending on the outcomes of MnDOT's ongoing risk-based and performance-based planning efforts. The investment category mixes for each district vary depending on the system characteristics and conditions unique to that area of the state.

## Impacts of Project Cost Changes

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Changes to project costs and schedules affect the state trunk highway capital investment program. These effects are most directly seen through revisions to the [STIP](#), which is a master listing of projects that MnDOT is planning to complete in the next four construction seasons. Seventy-five percent of the projects listed in the STIP are let and completed in their originally scheduled construction season. The completion date for other projects may be adjusted, and project scope and costs may increase or decrease after being listed in the STIP.

Project costs may change for a variety of reasons, including: changes in economic conditions, inflationary factors, scope changes, supplemental agreements, cost overruns and right of way acquisition. Costs may change prior to letting or after a contract is awarded. Changes in project costs prior to letting are handled through the STIP process. The STIP process allows projects to be added, revised or removed on an annual basis. Cost changes to a project post-letting are managed at the district level. If cost changes are higher than anticipated, set-asides are primarily used to handle the change. If project costs are lower than projected, other projects may be advanced to an earlier construction date, or funds may be directed to cover funding gaps and/or cost overruns on other projects. Project cost overruns and cost savings are managed on an aggregate program level.

If the statewide performance program has cumulative cost estimate changes resulting in a significant amount of uncommitted funds, a specific, one-time program may be implemented, such as the Better Roads for a Better Minnesota, which focused on achieving statewide performance objectives for overall pavement condition. To deliver the Better Roads program, projects that most effectively achieved these performance objectives and were at an appropriate stage in the project development process were accelerated so that they could be completed earlier than previously programmed.

Conversely, if cumulative project cost estimate changes increase by a significant enough level to necessitate revisions to the STIP, a number of projects may be delayed or removed, based on the fiscal ability to fully deliver each annual construction program. Projects that have not yet progressed through the project development process are more likely to be subject to schedule delays or cost revisions.

## Project Prioritization

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All projects identified within the 2018-21 STIP can be funded with current revenue projections and are high priority projects to local stakeholders, districts and Area Transportation Partnerships. Projects within the 2022-31 mid-range and long-range planning periods are a priority, but revenue forecasts, federal program requirements and funding sources are more uncertain and full funding may not have been identified. The [20-year Minnesota Highway Investment Plan](#) details how investments at a program level are prioritized in this mid-range and long-range timeframe.

## Project Summary Sheets

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See Appendix C for one-page summaries, statewide maps, district maps and an indexed table of all major highway projects. An explanation of the information included for each project, common abbreviations and definitions are provided in Appendix B.

# Environmental Mitigation and Compliance Analysis

The two projects below were chosen to represent the types of environmental mitigation and compliance issues MnDOT faces. Both were completed in 2016-17.

This segment of Interstate 35E is located in Ramsey and Washington counties within MnDOT’s Metro District. This project was highlighted because it represents some of the types of mitigation that are commonly part of projects in Minnesota’s largest metropolitan area.

The Highway 23 and bridge culvert replacement project from Becks Road to Interstate 35, in St. Louis County, is located in MnDOT’s District 1. This segment of Highway 23 was chosen because it is an example of the types of environmental mitigation involved in an urban/rural combination corridor in Greater Minnesota.

## Metro District Project: Interstate 35E in Little Canada, Vadnais Heights, White Bear Lake and White Bear Lake Township

This MnDOT Metro District project took place on nine miles of Interstate 35E from north of Highway 36 to County Road J. MnPASS is a strategy for managing and reducing congestion on some of Minnesota’s busiest highways. It does this by using managed lanes that are free for transit buses, motorcycles and High Occupant Vehicles, but single occupant vehicles are charged a fee during peak-travel times. This project extended the existing MnPASS lane in both directions from the previous terminus at Little Canada Road to CSAH 96 and only a northbound lane to County Road J. Other work consisted of storm sewer, stormwater ponds, restriping all lanes, and noise wall construction.

This project is a good example of MnDOT working proactively with landowners well ahead of the project to minimize changes to construction plans. They also designed with future projects in mind to avoid rework, including preliminary plans for additional stormwater capture and treatment required for the next phase of MnPASS.

Environmental mitigation and compliance costs (excluding noise walls) of \$1,053,300 are detailed below and account for approximately 4.0 percent of project costs.

The total project cost (also detailed below) was \$26.6 million. The construction cost of the project was \$21.9 million, right of way costs were \$280,000 and project engineering costs were \$4.4 million.

*Table 2: Environmental Mitigation Percentage for Interstate 35E in Ramsey and Washington Counties*

Environmental Mitigation & Compliance Costs Breakdown: I-35E MnPASS Lane	
<b>Environmental Documents: Costs NOT included in the mitigation cost total</b>	
Preliminary Investigation (Environmental Assessment/Worksheet)	\$68,100
<b>TOTAL</b>	<b>\$68,100</b>
<b>Environmental Investigation Costs</b>	
Contamination/Regulated Materials Investigation	\$25,600
<b>Sub-Total</b>	<b>\$25,600</b>

## Environmental Mitigation & Compliance Costs Breakdown: I-35E MnPASS Lane continued

<b>Preconstruction Engineering Costs</b>	
Stormwater Ponds	\$43,700
Erosion Control and Stormwater Management	\$59,000
<b>Sub-Total</b>	<b>\$102,700</b>
<b>Construction Engineering / Administration Costs</b>	
Stormwater Ponds	\$29,200
Erosion Control and Stormwater Management	\$39,400
<b>Sub-Total</b>	<b>\$68,600</b>
<b>Construction Costs</b>	
Stormwater Ponds	\$364,500
Erosion Control and Stormwater Management	\$491,900
<b>Sub-Total</b>	<b>\$856,400</b>
<b>Total Environmental Mitigation and Compliance Costs</b>	
<b>TOTAL</b>	<b>\$1,053,300</b>

<b>Noise Only Mitigation &amp; Compliance Costs Breakdown: Interstate 35E MnPASS Lane**</b>	
<b>Environmental Investigation Costs</b>	
Air & Noise Investigation	\$96,300
<b>Sub-Total</b>	<b>\$96,300</b>
<b>Preconstruction Engineering Costs</b>	
Noise Walls	\$839,600
<b>Sub-Total</b>	<b>\$839,000</b>
<b>Construction Engineering / Administration Costs</b>	
Noise Walls	\$559,700
<b>Sub-Total</b>	<b>\$559,700</b>
<b>Construction Costs</b>	
Noise Walls	\$6,996,700
<b>Sub-Total</b>	<b>\$6,996,700</b>
<b>Supplemental Agreements and Work Orders</b>	
Noise Wall color match with existing	\$14,300
<b>Sub-Total</b>	<b>\$14,300</b>
<b>Total Noise Only Environmental Mitigation and Compliance Costs</b>	
<b>TOTAL</b>	<b>\$8,506,000</b>
**Noise Analysis is mandated for major construction projects that are federally-funded and meet additional criteria. Noise walls are only constructed when analysis shows they are safe, feasible, a reasonable cost, provide adequate noise reduction, and those impacted vote to proceed.	

## Environmental Mitigation & Compliance Costs Breakdown: I-35E MnPASS Lane continued

Project Delivery Costs (Engineering)	
Preconstruction Engineering	\$2,629,00
Construction Engineering / Administration	\$1,752,700
Sub-Total	\$4,381,700
Right of Way Costs (land only)	
Total Project Right of Way Costs	\$280,000
Sub-Total	\$280,000
Construction Costs	
Total Project Construction Costs	\$21,908,600
Sub-Total	\$21,908,600
Total Project Costs	
Total Project Delivery Costs (Engineering)	\$4,381,700
Total Right of Way Costs	\$280,000
Total Project Construction Costs	\$21,908,600
TOTAL	\$26,570,300
Percentage of Project Costs for Environmental Mitigation & Compliance	
Total Environmental Mitigation Costs divided by Total Project Costs	
<b>\$1,053,300 divided by \$26,570,300 =</b>	<b>4.0%</b>

## Greater Minnesota Project: Highway 23 from Becks Road to Interstate 35

This District 1 project on Highway 23 is an urban corridor from the junction of Becks Road to the junction of Interstate 35, which consisted of pavement resurfacing, new sidewalk and curb ramps, new and replaced signals, and bridge culvert (Munger Bridge) replacement at Kingsbury Creek. MnDOT's District Hydraulics and State Bridge Hydraulics groups worked with the Minnesota Department of Natural Resources to ensure details of the bridge culvert replacement were conducive with the DNR Fisheries stream channel restoration project already in progress.

Environmental mitigation and compliance costs of \$1.0 million are detailed below and account for approximately 7.3 percent of project costs.

The total project cost (also detailed below) was \$13.9 million. The construction cost of the project was just under \$11 million, right of way costs were \$715,100, and project engineering costs were \$2.2 million.

Table 3: Environmental Mitigation Percentage for Highway 23 in St. Louis County

<b>Environmental Mitigation &amp; Compliance Costs Breakdown: Hwy 23 in St. Louis County</b>	
<b>Environmental Documents: Costs NOT included in the mitigation cost total</b>	
Preliminary Investigation (Categorical Exclusion)	\$14,500
<b>TOTAL</b>	<b>\$14,500</b>
<b>Environmental Investigation Costs</b>	
Contaminated/Regulated Materials Investigation	\$100,600
<b>Sub-Total</b>	<b>\$100,600</b>
<b>Preconstruction Engineering Costs</b>	
Stormwater Ponds/Pretreatment Systems	\$50,200
Erosion Control	\$32,000
<b>Sub-Total</b>	<b>\$72,200</b>
<b>Construction Engineering / Administration Costs</b>	
Stormwater Ponds/Pretreatment Systems	\$33,500
Erosion Control	\$21,400
<b>Sub-Total</b>	<b>\$54,900</b>
<b>Construction Costs</b>	
Stormwater Ponds/Pretreatment Systems	\$418,400
Erosion Control	\$266,900
Contaminated/Regulated Materials Removal, Disposal & Construction Oversight	\$102,800
<b>Sub-Total</b>	<b>\$788,100</b>
<b>Total Environmental Mitigation and Compliance Costs</b>	
<b>TOTAL</b>	<b>\$1,015,800</b>
<b>Project Delivery Costs (Engineering)</b>	
Preconstruction Engineering	\$1,316,400
Construction Engineering / Administration	\$877,600
<b>Sub-Total</b>	<b>\$2,194,000</b>
<b>Right of Way Costs (land only)</b>	
Total Project Right of Way Costs	\$715,100
<b>Sub-Total</b>	<b>\$715,100</b>
<b>Construction Costs</b>	
Total Project Construction Costs	\$10,969,900
<b>Sub-Total</b>	<b>\$10,969,900</b>

## Environmental Mitigation & Compliance Costs Breakdown: Hwy 23 continued

Total Project Costs	
Total Project Delivery Costs (Engineering)	\$2,194,000
Total Right of Way Costs	\$715,100
Total Project Construction Costs	\$10,969,900
<b>TOTAL</b>	<b>\$13,879,000</b>

Percentage of Project Costs for Environmental Mitigation & Compliance	
Total Environmental Mitigation Costs divided by Total Project Costs	
<b>\$1,015,800 divided by \$13,879,000 =</b>	<b>7.3%</b>

## Trunk Highway Fund Expenditures

The following contains fiscal year 2017 cost information for each of the categories listed in the graph below. The graph lists the budgetary expenditures by category. A brief explanation follows, describing what is included in each cost category.

*Table 4: Trunk highway fund and trunk highway bond fund expenditures by category (millions)*

Number	Category Name	TH Fund Expenditures
1	Road construction	\$1,104.30
2	Design and engineering	\$216.60
3	Labor	\$387.90
4	Acquisition of right of way	\$46.10
5	Litigation	\$5.80
6	Maintenance	\$130.80
7	Road operations	\$246.80
8	Planning	\$17.70
9	Environmental compliance	\$14.40
10	Administration	\$119.9

*Note: In \$ millions*

1. Road construction costs include all actual costs and encumbrances for road and bridge construction contracts. It includes both the design and engineering and construction cost portions of design/build contracts, and project related consultant costs.
2. Design and engineering costs include all costs and encumbrances for design, pre-design, construction and other engineering activities performed internally by MnDOT employees and by consultants.
3. Labor costs include all MnDOT expenditures to pay MnDOT employee wages including overtime and benefits for full-time, part-time and unclassified employees.
4. Right of way acquisition costs include all costs and encumbrances to acquire and manage land assets for the trunk highway system.
5. Litigation costs include the following: payments to the state Attorney General's Office for legal services, costs paid for expert witness fees, court reporters and transcribers, tort claims, and general and administrative costs related to legal services.
6. Maintenance costs include all costs and encumbrances to operate and maintain the trunk highway system, including bridges and structures inspection and maintenance and system roadways structure maintenance.
7. Road operations costs are all costs and encumbrances related to such activities as snow and ice removal, roadside and auxiliary infrastructure, and traffic devices operation and maintenance.

8. Planning costs are all costs for planning related to construction and maintenance of the trunk highway system, paid either to MnDOT employees or consultants.
9. Environmental compliance costs are derived from the completion of environmental review processes, documentation of review processes (e.g. Categorical Exclusions), environmental assessment worksheets, environmental impact statements, and environmental plans. Both internal employee and consultant costs are included.
10. Administration costs include all general and administrative costs related to the construction, maintenance and general support of the trunk highway system.

PLEASE NOTE:

- Debt service is not included in the road construction category.
- These 10 categories, required by the statute, do not represent all Trunk Highway Fund expenditures. Also, these 10 categories are not mutually exclusive; some expenditures are reported in more than one category, such as labor and administration.

# Products and Services Budget and Spending

Since 2014, MnDOT implemented and refined reporting of expenditures by products and services as required by statute. The budget and spending information in this section is for fiscal year 2017 for all funds.

## Methodology

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The financial information presented includes spending by each MnDOT office and district. This shows how each office and district contributes to the products and services that MnDOT delivered. Budget and expenditure amounts include bond proceeds.

### Notes about the data

- Budgets are estimated at the beginning of each year, and are not updated to reflect the various changes that occur throughout the year, including carryforward of funds from prior years, legislative actions, change in scope, etc.
- Timing differences between the two years of a biennium cause variances that would not be present if the report was prepared on a biennial basis. For example, carry-over from the first year of the biennium to the second year impacts the data for the second year.
- Some spending may not match budgets exactly because funds may have been encumbered in one year and expended in another.
- Uncommitted and carry-over budgets may seem to exhibit spending in excess of the total budget; however, this spending occurs within a biennium and is allowed by statute.
- Negative spending amounts exist when corrections from the prior period are made in the current period.

## Agency Overhead

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Agency overhead includes services provided throughout the department, such as:

- leave time
- fleet support
- buildings
- building services and maintenance
- finance and accounting
- human resources and workforce relations
- training
- supervision
- IT
- legal services
- government relations
- audit
- research
- communication
- citizen participation
- customer relations
- management and administration
- risk reserve
- workers' compensation
- insurance and unemployment

# 2017 Products and Services Summary

## 2017 Products and Services Framework

Table 5: Products and Services Framework

Program	
Budget Activity	Product and Service
<b>Multimodal Systems</b>	
Aeronautics	Airports Aviation Safety Operations and Regulation
Freight	Commercial Truck and Bus Safety Freight Rail Improvements Freight System Planning Port Improvements Rail Crossing Safety
Passenger Rail	Intercity Passenger Rail Improvement
Transit	Bicycle and Pedestrian Planning and Grants Light and Commuter Rail Transit Planning and Grants
<b>State Roads</b>	
Trunk Highway Program Planning and Delivery	Develop Highway Improvement Projects Highway Construction Management Oversight Plan Highway System Research and Development
Trunk Highway State Road Construction	Other Trunk Highway System Improvements Trunk Highway System Expansion Trunk Highway System Preservation
Trunk Highway Debt Service	Trunk Highway Debt Service
Trunk Highway Operations and Maintenance	Bridges and Structures Inspection and Maintenance Roadside and Auxiliary Infrastructure Snow and Ice System Roadway Structures Maintenance Traffic Devices Operation and Maintenance
Statewide Radio Communications	Radio Towers and Communications
<b>Local Roads</b>	
County State Aid Roads	County State Aid Highway
Municipal State Aid Roads	Municipal State Aid Highway

Note: External Partner Support can be used by any office and any budget activity.

## Department Summary

Department Summary	2016-17 Biennium					
	2015 Totals		2016 Totals		2017 Totals	
Products and Services	Budget	Spent	Budget	Spent	Budget	Spent
Airports	108,502	50,028	85,339	57,270	108,916	54,864
Aviation Safety Operation and Regulation	13,644	17,601	19,677	21,951	17,792	15,607
Bicycle and Pedestrian Planning and Grants	66	13,081	4,860	27,124	435	1,051
Bridges and Structures Inspection, Maintenance	12,611	10,647	9,575	10,526	11,372	12,754
Commercial Truck and Bus Safety	3,134	3,641	4,230	3,514	4,458	4,000
County State Aid Highway	930,583	879,055	932,872	871,147	968,594	833,636
Develop Highway Improvement Projects	65,864	92,032	93,760	86,603	86,626	67,825
External Partner Support	191,558	83,474	93,641	84,860	232,137	60,453
Freight Rail Improvements	1,758	2,002	3,311	3,821	2,270	1,974
Freight System Planning	568	457	267	168	177	154
Highway Construction Management Oversight	42,694	45,857	53,179	49,959	48,688	46,702
Intercity Passenger Rail Improvement	2,740	7,365	8,094	5,971	4,316	4,092
Light and Commuter Rail	6,004	589	4,199	3,991	1,403	0
Municipal State Aid Highway	169,162	183,273	183,244	187,444	180,968	151,168
Plan Highway System	26,675	16,827	26,121	16,080	35,765	21,629
Port Improvements	32	1,047	5,899	4,030	1,582	771
Radio Towers and Communications	5,464	28,665	3,852	17,009	15,566	17,854
Rail Safety	9,563	5,127	14,064	10,027	9,589	9,251
Research and Development	17,458	8,992	9,186	7,779	16,166	7,186
Roadside and Auxiliary Infrastructure	18,877	20,366	15,584	17,899	22,460	22,172
Snow and Ice	81,602	80,153	74,351	66,322	76,005	81,847
State Road Construction	1,055,624	1,335,329	1,148,859	1,054,348	1,026,474	1,194,411
System Roadway Structures Maintenance	38,546	41,742	36,488	37,913	45,471	45,389
Traffic Operation and Maintenance	44,471	46,191	41,613	46,821	55,047	40,272
Transit Planning and Grants	140,436	80,179	132,051	114,760	131,814	149,717
Trunk Highway Debt Service	199,739	157,024	197,381	183,156	231,199	195,704
<b>Direct</b>	<b>3,187,375</b>	<b>3,210,744</b>	<b>3,201,697</b>	<b>2,990,493</b>	<b>3,335,290</b>	<b>3,040,483</b>
<b>Agency Overhead</b>	<b>270,600</b>	<b>317,481</b>	<b>391,084</b>	<b>294,068</b>	<b>272,407</b>	<b>355,726</b>
<b>Grand Total</b>	<b>3,457,975</b>	<b>3,528,225</b>	<b>3,592,781</b>	<b>3,284,561</b>	<b>3,607,697</b>	<b>3,396,209</b>

Note: The dollar amounts listed in the tables are in thousands. Totals may not add up due to rounding

Note: Upon continued products and services maturity, beginning in FY15 fleet and inventory costs were included in Direct Expenses. Fleet and inventory totaled \$81million in FY17, \$70million in FY16 and \$94million in FY15.

Note: The Agency Overhead amounts above include items such as workers compensation, severance (medical portion), unemployment, and risk reserve. These specific items totaled \$12,857 in FY15, \$13,415 in FY 16 and \$13,837 in FY 17.

## Division Summary

Division Summary	Chief Counsel Division		Chief of Staff Division		Commissioners Office Division	
	Budget	Spent	Budget	Spent	Budget	Spent
Products and Services						
Airports						
Aviation Safety Operation and Regulation						
Bicycle and Pedestrian Planning and Grants						
Bridges and Structures Inspection, Maintenance						
Commercial Truck and Bus Safety						
County State Aid Highway						
Develop Highway Improvement Projects	737	525				
External Partner Support						
Freight Rail Improvements						
Freight System Planning						
Highway Construction Management Oversight	742	763				
Intercity Passenger Rail Improvement						
Light and Commuter Rail						
Municipal State Aid Highway						
Plan Highway System	1,125	1,829				
Port Improvements						
Radio Towers and Communications						
Rail Safety						
Research and Development						
Roadside and Auxiliary Infrastructure						
Snow and Ice						
State Road Construction						
System Roadway Structures Maintenance						
Traffic Operation and Maintenance						
Transit Planning and Grants						
Trunk Highway Debt Service						
<b>Direct</b>	<b>2,604</b>	<b>3,117</b>				
<b>Agency Overhead</b>	<b>8,929</b>	<b>10,129</b>	<b>2,875</b>	<b>3,211</b>	<b>4,912</b>	<b>4,411</b>
<b>Grand Total</b>	<b>11,533</b>	<b>13,246</b>	<b>2,875</b>	<b>3,211</b>	<b>4,912</b>	<b>4,411</b>
<b>Grand Total</b>	<b>3,457,975</b>	<b>3,528,225</b>	<b>3,592,781</b>	<b>3,284,561</b>	<b>3,607,697</b>	<b>3,396,209</b>

Note: The dollar amounts listed in the tables are in thousands. Totals may not add up due to rounding.

Division Summary (continued)	Corporate Services Division		Engineering Services Division		Modal Planning & Program Management Division	
	Budget	Spent	Budget	Spent	Budget	Spent
Products and Services						
Airports					108,916	54,864
Aviation Safety Operation and Regulation					17,792	15,607
Bicycle and Pedestrian Planning and Grants					435	1,051
Bridges and Structures Inspection, Maintenance			1,087	2,405		
Commercial Truck and Bus Safety					4,458	4,000
County State Aid Highway						
Develop Highway Improvement Projects	802	787	18,991	21,496	219	250
External Partner Support	945	494	68,623	40,272	2,579	1,687
Freight Rail Improvements					2,270	1,974
Freight System Planning					177	154
Highway Construction Management Oversight	448	431	6,548	6,461	2	11
Intercity Passenger Rail Improvement					4,316	4,092
Light and Commuter Rail					1,403	0
Municipal State Aid Highway						
Plan Highway System	22	80	546	511	29,663	14,189
Port Improvements					1,582	771
Radio Towers and Communications						
Rail Safety					9,589	9,251
Research and Development	277	15	1,962	2,029	9,954	4,184
Roadside and Auxiliary Infrastructure			400	629		
Snow and Ice			22	17		
State Road Construction	0	193	1,479	695	292,786	32,524
System Roadway Structures Maintenance			836	1,080	0	40
Traffic Operation and Maintenance			18	175	140	140
Transit Planning and Grants					131,814	149,717
Trunk Highway Debt Service					231,199	195,704
<b>Direct</b>	<b>2,494</b>	<b>2,000</b>	<b>100,512</b>	<b>75,770</b>	<b>849,294</b>	<b>490,210</b>
<b>Agency Overhead</b>	<b>34,165</b>	<b>57,833</b>	<b>21,438</b>	<b>39,594</b>	<b>18,840</b>	<b>19,631</b>
<b>Grand Total</b>	<b>36,659</b>	<b>59,833</b>	<b>121,950</b>	<b>115,364</b>	<b>868,134</b>	<b>509,841</b>

Note: The dollar amounts listed in the tables are in thousands. Totals may not add up due to rounding.

Division Summary (continued)	Operations Division		State Aid for Local Transportation Division	
	Budget	Spent	Budget	Spent
Products and Services				
Airports				
Aviation Safety Operation and Regulation				
Bicycle and Pedestrian Planning and Grants				
Bridges and Structures Inspection, Maintenance	10,285	10,349		
Commercial Truck and Bus Safety				
County State Aid Highway			968,594	833,636
Develop Highway Improvement Projects	65,877	44,767		
External Partner Support	151,586	9,464	8,404	8,536
Freight Rail Improvements				
Freight System Planning				
Highway Construction Management Oversight	40,948	39,036		
Intercity Passenger Rail Improvement				
Light and Commuter Rail				
Municipal State Aid Highway			180,968	151,168
Plan Highway System	4,409	5,020		
Port Improvements				
Radio Towers and Communications			15,566	17,854
Rail Safety				
Research and Development	3,973	958		
Roadside and Auxiliary Infrastructure	22,060	21,543		
Snow and Ice	75,983	81,830		
State Road Construction	732,209	1,160,999		
System Roadway Structures Maintenance	44,635	44,269		
Traffic Operation and Maintenance	54,889	39,957		
Transit Planning and Grants				
Trunk Highway Debt Service				
<b>Direct</b>	<b>1,206,854</b>	<b>1,458,192</b>	<b>1,173,532</b>	<b>1,011,194</b>
<b>Agency Overhead</b>	<b>174,707</b>	<b>203,093</b>	<b>4,052</b>	<b>3,987</b>
<b>Grand Total</b>	<b>1,381,561</b>	<b>1,661,285</b>	<b>1,177,584</b>	<b>1,015,181</b>

Note: The dollar amounts listed in the tables are in thousands. Totals may not add up due to rounding.

Offices and Districts by Division

Chief Counsel Division	Chief Counsel		Civil Rights		Total	
	Budget	Spent	Budget	Spent	Budget	Spent
Products and Services						
Develop Highway Improvement Projects			737	525	737	525
Highway Construction Management Oversight			742	763	742	763
Plan Highway System			1,125	1,829	1,125	1,829
<b>Direct</b>	<b>0</b>	<b>0</b>	<b>2,604</b>	<b>3,117</b>	<b>2,604</b>	<b>3,117</b>
<b>Agency Overhead</b>	<b>7,147</b>	<b>5,268</b>	<b>1,782</b>	<b>4,861</b>	<b>8,929</b>	<b>10,129</b>
<b>Grand Total</b>	<b>7,147</b>	<b>5,268</b>	<b>4,386</b>	<b>7,978</b>	<b>11,533</b>	<b>13,246</b>

Chief of Staff Division	Chief of Staff		Communications		Equity & Diversity		Public Engagement & Constituent Services		Total	
	Budget	Spent	Budget	Spent	Budget	Spent	Budget	Spent	Budget	Spent
Products and Services										
<b>Agency Overhead</b>	<b>392</b>	<b>253</b>	<b>1,191</b>	<b>1,172</b>	<b>942</b>	<b>935</b>	<b>350</b>	<b>851</b>	<b>2,875</b>	<b>3,211</b>
<b>Grand Total</b>	<b>392</b>	<b>253</b>	<b>1,191</b>	<b>1,172</b>	<b>942</b>	<b>935</b>	<b>350</b>	<b>851</b>	<b>2,875</b>	<b>3,211</b>

Note: The offices of Customer Relations and Public Engagement & Constituent Services were combined during 2016 and are therefore both combined under Public Engagement & Constituent Services

Commissioner's Office Division	Audit		Commissioner's Staff		Total	
	Budget	Spent	Budget	Spent	Budget	Spent
Products and Services						
<b>Agency Overhead</b>	<b>1,847</b>	<b>1,664</b>	<b>3,065</b>	<b>2,747</b>	<b>4,912</b>	<b>4,411</b>
<b>Grand Total</b>	<b>1,847</b>	<b>1,664</b>	<b>3,065</b>	<b>2,747</b>	<b>4,912</b>	<b>4,411</b>

Corporate Services Division	Administration		Financial Management		Human Resources		Technology Investment Management		Corporate Services Division Administration		Total	
	Budget	Spent	Budget	Spent	Budget	Spent	Budget	Spent	Budget	Spent	Budget	Spent
Develop Highway Improvement Projects					802	787					802	787
External Partner Support	105	104	833	328	7	62					945	494
Highway Construction Management Oversight					448	431					448	431
Plan Highway System					22	80					22	80
Research and Development			250	0	27	15					277	15
State Road Construction								193			0	193
Direct	105	104	1,083	328	1,306	1,375	0	193	0	0	2,494	2,000
Agency Overhead	12,397	13,259	5,270	8,051	6,387	6,433	9,137	29,132	974	958	34,165	57,833
Grand Total	12,502	13,363	6,353	8,379	7,693	7,808	9,137	29,325	974	958	36,659	59,833

Engineering Services Division	Bridges		Construction & Innovative Contracting		Environmental Stewardship		Land Management		Materials & Road Research	
	Budget	Spent	Budget	Spent	Budget	Spent	Budget	Spent	Budget	Spent
Products and Services										
Bridges and Structures Inspection, Maintenance	1,086	1,764			1	0				
Develop Highway Improvement Projects	5,156	4,449	478	164	2,264	2,172	7,345	7,392	3,748	3,085
External Partner Support	55,225	28,732	115	86	189	160	11,394	6,398	1,535	2,582
Highway Construction Management Oversight	1,275	1,033	968	1,007	153	104	544	77	3,608	3,395
Plan Highway System	97	112			435	357			14	25
Research and Development	53	86			216	178			1,693	1,762
Roadside and Auxiliary Infrastructure	9	2			121	122	270	231		
Snow and Ice	0	2			22	15				
State Road Construction	353	54					0	161	1,126	479
System Roadway Structures Maintenance	22	5			20	25				
Traffic Operation and Maintenance	17	32			1	0				
<b>Direct</b>	<b>63,293</b>	<b>36,271</b>	<b>1,561</b>	<b>1,257</b>	<b>3,422</b>	<b>3,133</b>	<b>19,553</b>	<b>14,259</b>	<b>11,724</b>	<b>11,328</b>
<b>Agency Overhead</b>	<b>4,781</b>	<b>4,824</b>	<b>2,529</b>	<b>2,379</b>	<b>3,665</b>	<b>3,134</b>	<b>5,335</b>	<b>4,663</b>	<b>5,128</b>	<b>7,011</b>
<b>Grand Total</b>	<b>68,074</b>	<b>41,095</b>	<b>4,090</b>	<b>3,636</b>	<b>7,087</b>	<b>6,267</b>	<b>24,888</b>	<b>18,922</b>	<b>16,852</b>	<b>18,339</b>

Engineering Services Division (continued)	Project Management and Technical Support		Engineering Services Division Administration		Total	
	Budget	Spent	Budget	Spent	Budget	Spent
Products and Services						
Bridges and Structures Inspection, Maintenance			0	641	1,087	2,405
Develop Highway Improvement Projects	0	4,234			18,991	21,496
External Partner Support	165	2,314			68,623	40,272
Highway Construction Management Oversight	0	845			6,548	6,461
Plan Highway System	0	17			546	511
Research and Development	0	3			1,962	2,029
Roadside and Auxiliary Infrastructure			0	274	400	629
Snow and Ice					22	17
State Road Construction	0	1			1,479	695
System Roadway Structures Maintenance			794	1,050	836	1,080
Traffic Operation and Maintenance			0	143	18	175
Direct	165	7,414	794	2,108	100,512	75,770
Agency Overhead	0	5,794	0	11,789	21,438	39,594
Grand Total	165	13,208	794	13,897	121,950	115,364

Modal Planning & Program Management Division	Aeronautics		Freight & Commercial Vehicle Operations		Passenger Rail		Transit	
	Budget	Spent	Budget	Spent	Budget	Spent	Budget	Spent
Products and Services								
Airports	108,916	54,864						
Aviation Safety Operation and Regulation	17,792	15,607						
Bicycle and Pedestrian Planning and Grants							435	1,051
Commercial Truck and Bus Safety			4,458	3,986				
Develop Highway Improvement Projects							58	51
External Partner Support	10	0	1,344	1,337	580	202	45	68
Freight Rail Improvements			2,270	1,974				
Freight System Planning			177	154				
Highway Construction Management Oversight								
Intercity Passenger Rail Improvement					4,316	4,092		
Light and Commuter Rail							1,403	0
Plan Highway System							0	201
Port Improvements			1,582	771				
Rail Safety			9,589	9,251				
Research and Development								
State Road Construction								
System Roadway Structures Maintenance								
Traffic Operation and Maintenance								
Transit Planning and Grants							131,814	149,717
Trunk Highway Debt Service								
<b>Direct</b>	<b>126,718</b>	<b>70,471</b>	<b>19,420</b>	<b>17,473</b>	<b>4,896</b>	<b>4,294</b>	<b>133,755</b>	<b>151,088</b>
<b>Agency Overhead</b>	<b>2,734</b>	<b>2,901</b>	<b>3,466</b>	<b>3,701</b>	<b>114</b>	<b>92</b>	<b>1,206</b>	<b>1,203</b>
<b>Grand Total</b>	<b>129,452</b>	<b>73,372</b>	<b>22,886</b>	<b>21,174</b>	<b>5,010</b>	<b>4,386</b>	<b>134,961</b>	<b>152,291</b>

Modal Planning & Program Management Division (continued)	Transportation System Management		Modal Planning & Program Management Division Administration		Total	
	Budget	Spent	Budget	Spent	Budget	Spent
Products and Services						
Airports					108,916	54,864
Aviation Safety Operation and Regulation					17,792	15,607
Bicycle and Pedestrian Planning and Grants					435	1,051
Commercial Truck and Bus Safety			0	14	4,458	4,000
Develop Highway Improvement Projects	161	199			219	250
External Partner Support	600	80			2,579	1,687
Freight Rail Improvements					2,270	1,974
Freight System Planning					177	154
Highway Construction Management Oversight	2	11			2	11
Intercity Passenger Rail Improvement					4,316	4,092
Light and Commuter Rail					1,403	0
Plan Highway System	29,663	13,988			29,663	14,189
Port Improvements					1,582	771
Rail Safety					9,589	9,251
Research and Development	9,954	4,184			9,954	4,184
State Road Construction	292,786	32,524			292,786	32,524
System Roadway Structures Maintenance			0	40	0	40
Traffic Operation and Maintenance	140	140			140	140
Transit Planning and Grants					131,814	149,717
Trunk Highway Debt Service	231,199	195,704			231,199	195,704
Direct	564,505	246,830	0	54	849,294	490,210
Agency Overhead	8,820	4,849	2,500	6,885	18,840	19,631
<b>Grand Total</b>	<b>573,325</b>	<b>251,679</b>	<b>2,500</b>	<b>6,939</b>	<b>868,134</b>	<b>509,841</b>

Operations Division	District 1		District 2		District 3		District 4	
	Budget	Spent	Budget	Spent	Budget	Spent	Budget	Spent
Products and Services								
Bridges and Structures Inspection, Maintenance	1,307	1,247	549	573	685	694	364	355
Develop Highway Improvement Projects	14,164	5,799	4,544	2,955	5,114	3,996	2,567	2,367
External Partner Support	934	1,036	119	269	374	597	1,384	358
Highway Construction Management Oversight	3,876	5,453	1,860	1,457	4,684	3,299	2,640	1,936
Plan Highway System	301	323	361	354	429	261	233	212
Research and Development			3	2	8	5	1	2
Roadside and Auxiliary Infrastructure	1,315	1,621	1,334	1,315	1,714	1,941	1,374	1,454
Snow and Ice	9,705	11,918	5,944	7,130	8,441	9,871	6,302	6,938
State Road Construction	98,281	163,984	26,814	52,033	58,949	94,750	30,874	87,991
System Roadway Structures Maintenance	5,496	5,066	2,991	3,211	5,435	5,366	3,651	3,882
Traffic Operation and Maintenance	1,493	1,772	915	1,082	2,589	2,561	1,572	1,546
<b>Direct</b>	<b>136,872</b>	<b>198,219</b>	<b>45,434</b>	<b>70,381</b>	<b>88,422</b>	<b>123,341</b>	<b>50,962</b>	<b>107,041</b>
<b>Agency Overhead</b>	<b>16,150</b>	<b>14,741</b>	<b>9,900</b>	<b>9,529</b>	<b>15,475</b>	<b>15,433</b>	<b>10,669</b>	<b>10,545</b>
<b>Grand Total</b>	<b>153,022</b>	<b>212,960</b>	<b>55,334</b>	<b>79,910</b>	<b>103,897</b>	<b>138,774</b>	<b>61,631</b>	<b>117,586</b>

Operations Division (continued)	District 6		District 7		District 8		Metro District	
	Budget	Spent	Budget	Spent	Budget	Spent	Budget	Spent
Products and Services								
Bridges and Structures Inspection, Maintenance	1,749	1,923	826	669	680	649	4,118	4,233
Develop Highway Improvement Projects	8,695	7,279	4,009	2,802	2,228	1,679	22,324	16,260
External Partner Support	43,286	1,451	129	265	94	164	103,792	5,113
Highway Construction Management Oversight	6,992	5,493	2,992	2,894	1,975	1,436	14,755	16,706
Plan Highway System	316	338	287	235	307	239	1,683	1,396
Research and Development	2	0	0	5	0	1	28	15
Roadside and Auxiliary Infrastructure	2,382	2,780	1,659	1,414	927	929	4,950	5,327
Snow and Ice	8,904	10,879	7,335	7,313	4,552	5,548	21,304	21,160
State Road Construction	71,481	177,892	82,849	155,209	28,539	58,120	311,466	361,979
System Roadway Structures Maintenance	4,093	5,053	5,263	4,625	2,332	2,301	15,388	14,766
Traffic Operation and Maintenance	2,495	2,454	1,081	1,108	753	865	24,631	18,921
<b>Direct</b>	<b>150,395</b>	<b>215,542</b>	<b>106,430</b>	<b>176,539</b>	<b>42,387</b>	<b>71,931</b>	<b>524,439</b>	<b>465,876</b>
<b>Agency Overhead</b>	<b>17,720</b>	<b>16,107</b>	<b>12,814</b>	<b>12,065</b>	<b>9,650</b>	<b>9,157</b>	<b>52,027</b>	<b>51,622</b>
<b>Grand Total</b>	<b>168,115</b>	<b>231,649</b>	<b>119,244</b>	<b>188,604</b>	<b>52,037</b>	<b>81,088</b>	<b>576,466</b>	<b>517,498</b>

Operations Division (continued)	Maintenance		Traffic, Safety & Technology		Operations Division Administration		Total	
	Budget	Spent	Budget	Spent	Budget	Spent	Budget	Spent
Products and Services								
Bridges and Structures Inspection, Maintenance	6	1	1	5			10,285	10,349
Develop Highway Improvement Projects			2,232	1,630			65,877	44,767
External Partner Support	0	18	1,392	82	82	111	151,586	9,464
Highway Construction Management Oversight			1,174	362			40,948	39,036
Plan Highway System			492	1,662			4,409	5,020
Research and Development			3,931	928			3,973	958
Roadside and Auxiliary Infrastructure	6,405	4,762					22,060	21,543
Snow and Ice	3,496	1,073					75,983	81,830
State Road Construction			22,135	8,585	821	456	732,209	1,160,999
System Roadway Structures Maintenance	-14	-1					44,635	44,269
Traffic Operation and Maintenance	18,883	9,561	477	87			54,889	39,957
<b>Direct</b>	<b>28,776</b>	<b>15,414</b>	<b>31,834</b>	<b>13,341</b>	<b>903</b>	<b>567</b>	<b>1,206,854</b>	<b>1,458,192</b>
<b>Agency Overhead</b>	<b>27,884</b>	<b>53,809</b>	<b>2,418</b>	<b>2,620</b>	<b>0</b>	<b>7,465</b>	<b>174,707</b>	<b>203,093</b>
<b>Grand Total</b>	<b>56,660</b>	<b>69,223</b>	<b>34,252</b>	<b>15,961</b>	<b>903</b>	<b>8,032</b>	<b>1,381,561</b>	<b>1,661,285</b>

State Aid Division	State Aid for Local Transportation		Statewide Radio Communications		Total	
	Budget	Spent	Budget	Spent	Budget	Spent
Products and Services						
County State Aid Highway	968,594	833,636			968,594	833,636
External Partner Support	1,089	1,225	7,315	7,311	8,404	8,536
Municipal State Aid Highway	180,968	151,168			180,968	151,168
Radio Towers and Communications			15,566	17,854	15,566	17,854
Direct	1,150,651	986,029	22,881	25,165	1,173,532	1,011,194
Agency Overhead	807	686	3,245	3,301	4,052	3,987
<b>Grand Total</b>	<b>1,151,458</b>	<b>986,715</b>	<b>26,126</b>	<b>28,466</b>	<b>1,177,584</b>	<b>1,015,181</b>

# Productivity Measures

## Introduction

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Traditional performance measures used by MnDOT are measures of product and service delivery effectiveness. Performance measures have been used at MnDOT since the 1990s. Productivity measures help to evaluate how efficiently MnDOT's products and services are delivered.

## Background

The productivity measures are an effort to identify, create, examine and document current levels of productivity within MnDOT for MnDOT's core products and services. This project is aimed at complying with the requirement to annually report measures of MnDOT productivity for the previous fiscal year.

The report includes the following measures:

- Bridge inspection: cost per square foot of deck area
- Bridge maintenance: cost per square foot of deck area
- Pavement: cost per roadway mile-year added
- Snow and ice: cost per plow mile driven
- Pavement markings: cost per mile striped
- Transit: MnDOT administrative cost per transit passenger trip
- Freight: MnDOT administrative cost per oversize/overweight permit issued
- Program planning and delivery to construction expenditure ratio

These areas represent a subset of MnDOT's products and services.

## Purpose and scope

The productivity measures contained in this report were identified and developed by each respective operational area. The data is repeatable, verifiable and auditable. Measures of productivity should be viewed in the context of MnDOT's mission to deliver a safe and reliable multi-modal transportation system for Minnesotans. While measures of effectiveness are not included in this report, they can be found within MnDOT's [Annual Transportation Performance Report](#).

Costs are presented in both inflation adjusted and unadjusted terms. The base year for inflation adjusted data is 2017; therefore, the adjusted and unadjusted values for 2017 are identical. Inflation factors were selected for each measure based upon the nature of the work performed and the expenses incurred. For measures where the bulk of costs are labor related, a 2 percent inflation factor is used based on historic MnDOT labor inflation rates. For measures where the bulk of costs are maintenance related, a 3 percent inflation factor is used based on average inflation in MnDOT's maintenance and operations commodities and labor from 2008-2017.

For the pavement measure, actual values are used from MnDOT's pavement surfacing index. The surfacing index has been volatile, but increased an average of 2 percent per year from 2007-2017. For the program planning and delivery to construction expenditure ratio, two different inflation factors were applied. For the program planning and delivery side of the ratio, the 2 percent labor inflation factor is applied since those expenditures are primarily labor. For the construction expenditure side of the ratio, actual MnDOT construction cost index values are used. This index has been volatile, but increased an average of 2 percent per year from 2007-2017.

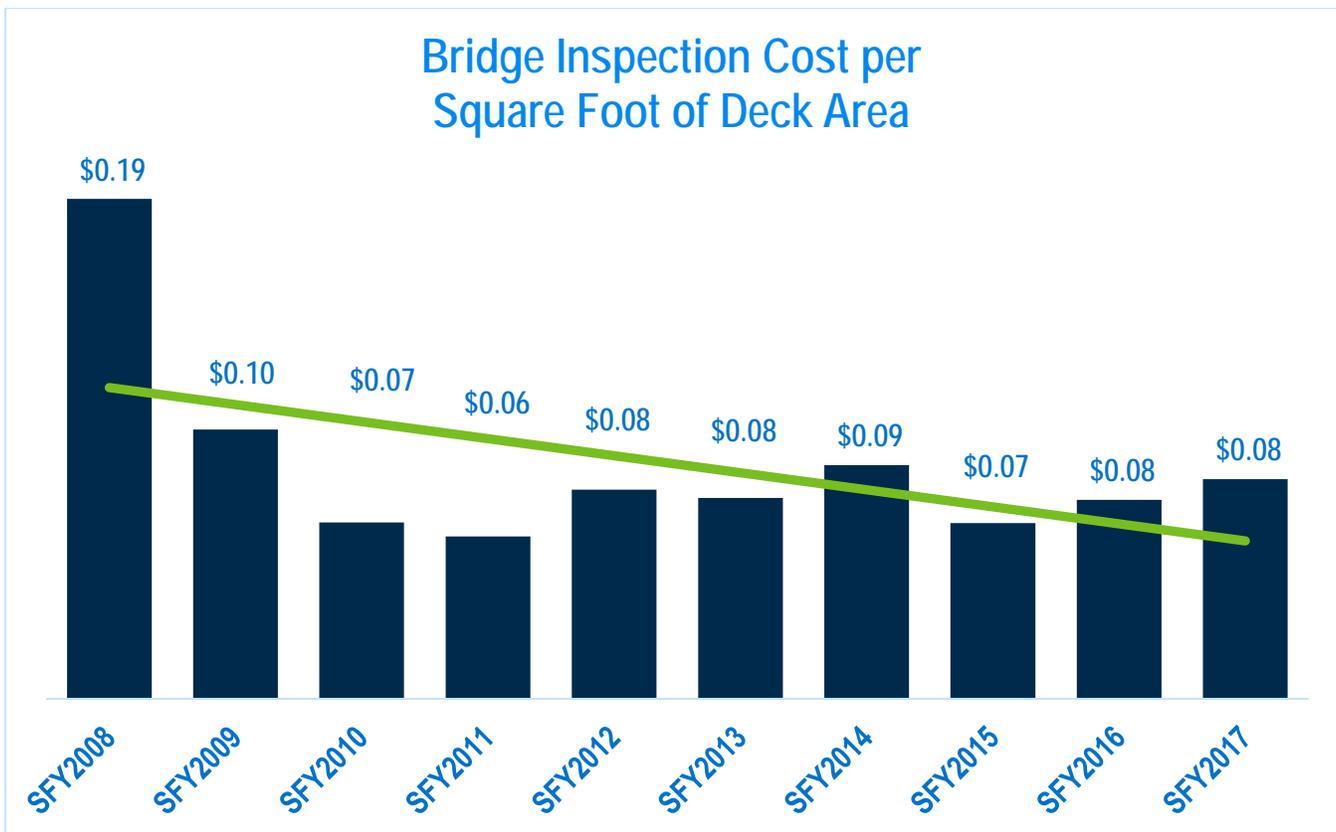
## Bridges: Inspection Cost per Square Foot of Deck Area

Routine and fracture critical bridge safety inspections play key roles in maintaining a safe transportation system, ensuring the structural integrity of bridges and keeping MnDOT in compliance with state and federal laws. Bridge safety inspections also provide the condition assessment data that supports MnDOT investment decisions regarding bridge repair, rehabilitation and replacement.

### Measure definition

The bridge inspection productivity measure tracks dollars spent on routine and fracture critical bridge inspections (labor and equipment costs) against the total deck area of bridges inspected to calculate the average inspection cost per square foot. Note that these average inspection costs are not necessarily directly proportional to the square footage of a particular bridge. Many factors affect inspection costs such as bridge design type complexity, access, traffic-control requirements, equipment requirements and the bridge's level of deterioration.

Figure 2: State Fiscal Year 2008-2017 Bridge Inspection Cost per Sq. Ft. of Deck Area



The square foot of deck area for 2008–2011 does not include all bridges inspected due to previous cost accounting practices and software limitations. Data from 2012 forward is accurate with regard to both cost and square foot of deck area inspected. Costs were adjusted to 2017 dollars using a 2 percent annual inflation factor based on historic MnDOT labor inflation.

### Results and analysis

The cost per square foot for bridge inspections were fairly stable in the years following a spike in 2008 and 2009. Bridge inspection expenses and cost per square foot peaked in fiscal year 2008 when the governor mandated accelerated inspections for all bridges. Changes to the National Bridge Inspection Standards in 2016 intensified inspection and documentation requirements thereby increasing inspection costs.

*Table 6: Inflation-adjusted bridge inspection cost per square foot of deck area*

State Fiscal Year	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Bridge inspection expenses (\$1,000)	\$7,607	\$3,243	\$2,153	\$1,920	\$2,038	\$2,221	\$2,206	\$2,064	\$2,270	\$2,428
Sq. ft. of bridge deck inspected (1,000s)	40,191	31,804	32,243	31,236	25,752	29,220	24,934	31,044	30,107	29,182
Cost per sq. ft. of inspection	\$0.19	\$0.10	\$0.07	\$0.06	\$0.08	\$0.08	\$0.09	\$0.07	\$0.08	\$0.08

Costs were adjusted to 2017 dollars using a 2 percent annual inflation factor based on historic MnDOT labor inflation.

*Table 7: Actual (unadjusted) bridge inspection cost per square foot of deck area*

State Fiscal Year	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Bridge inspection expenses (\$1,000)	\$6,365	\$2,768	\$1,874	\$1,705	\$1,846	\$2,052	\$2,079	\$1,984	\$2,225	\$2,428
Sq. ft. of bridge deck inspected (1,000s)	40,191	31,804	32,243	31,236	25,752	29,220	24,934	31,044	30,107	29,182
Cost per sq. ft. of inspection	\$0.16	\$0.09	\$0.06	\$0.06	\$0.07	\$0.07	\$0.08	\$0.06	\$0.07	\$0.08

Numbers within the table are not adjusted for inflation.

## Major influencing factors

Primary factors that influence this measure include changes to:

- Inspection intensity and documentation requirements – changes implemented in 2016 described above
- Fracture critical inspection frequency - changes to the fracture critical bridge inspection frequency from every 48 months to every 24 months in 2008. Fracture critical inspections take more time and are more expensive per square foot of bridge deck area than routine inspections.
- Age of infrastructure and condition of the structure, resulting in more deterioration to monitor and increased inspection times.
- Size and complexity of bridges - trends toward certain new and reconstructed bridges as complex bridges also add inspection time and create access issues.
- Increases in traffic control requirements and the cost of equipment and materials.

Also, since 2012, a possible factor influencing MnDOT time and effort on bridge inspections is the National Bridge Inspection Oversight Program established by FHWA in 2011. This program evaluates state bridge inspection programs for compliance annually using 23 metrics. These metrics were put in place to ensure consistency among states' programs and to ensure bridges are safe, reduce liability for bridge owners and increase public confidence. This program resulted in more administrative costs to the states, and has possibly impacted the amount of time

spent reporting bridge inspection information. Because of the numerous contributing factors, the cost per square foot for bridge inspections is not necessarily directly proportional to the bridge deck area.

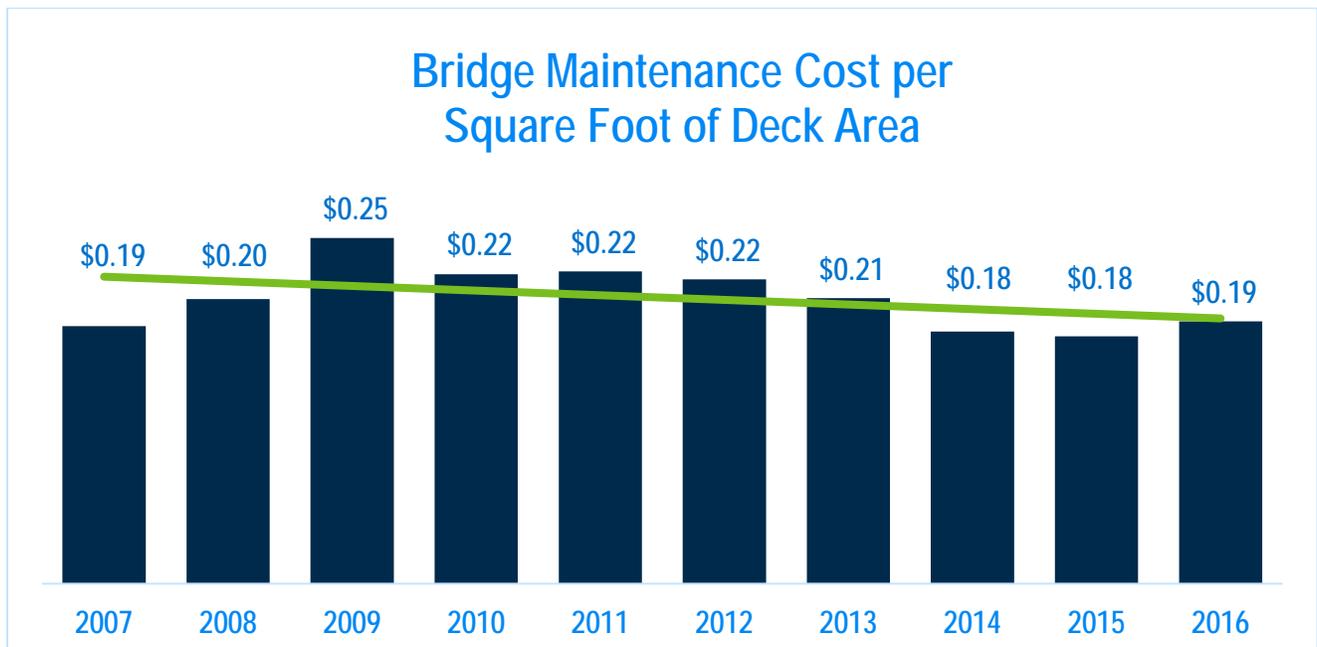
## Bridges: Maintenance Cost per Square Foot of Deck Area

Bridge preservation keeps bridges in sound condition and slows their deterioration through preventive and reactive maintenance. Preventive maintenance includes routine maintenance activities performed on a cyclical basis and periodic minor repairs. Reactive maintenance includes those activities scheduled in response to an identified condition that may compromise ride, public safety or bridge structural function. Preventive maintenance on newer bridges is cost effective and will keep them in good condition longer. Reactive maintenance, when needed, will delay the need for extensive rehabilitation or replacement.

### Measure definition

The bridge maintenance productivity measure compares dollars spent on preventive and reactive maintenance (labor, equipment and material costs) against the total deck area of Minnesota’s trunk highway bridges to calculate the average cost per square foot of deck area maintained. Note that these average maintenance costs are not necessarily directly proportional to the square footage of a particular bridge. Many factors affect maintenance costs such as bridge design type and complexity, access, traffic-control requirements, scope of work, equipment requirements and the bridge’s level of deterioration.

Figure 3: 2007-2016 Bridge Maintenance Cost per Sq. Ft. of Deck Area



Costs were adjusted to 2017 dollars using a 3 percent annual inflation factor based on historic MnDOT maintenance and operations commodity and labor inflation.

### Results and analysis

Over the last decade, between \$0.18 and \$0.25 per square foot was spent on average to perform preventive and reactive maintenance adjusting for inflation. As a reference, it costs an average of \$150 per square foot to construct a new bridge.

The overall trend is flat, although costs have trended downward over the last few years. MnDOT's ability to perform bridge preventive maintenance was enhanced from FY 2006-2009 (2007-2009 data reflected in this Report) due to a budget shift from State Road Construction to Operations and Maintenance. This may partially account for the temporary rise in maintenance costs per square foot.

With additional funding MnDOT can address medium and low priority reactive maintenance needs that might otherwise wait. Consequently, higher costs per square foot in one year help prevent more urgent and costly repairs in the future. As the bridge system ages, maintenance costs per square foot may trend upwards as the amount of reactive maintenance required is expected to increase.

*Table 8: Inflation-adjusted bridge maintenance cost per square foot of deck area*

Calendar Year	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Preventive Maintenance Expenditures (\$1,000)	\$4,571	\$4,226	\$4,465	\$3,868	\$4,408	\$3,081	\$2,788	\$3,107	\$3,187	\$3,174
Reactive Maintenance Expenditures (\$1,000)	\$4,163	\$5,513	\$7,319	\$6,719	\$6,281	\$7,334	\$7,078	\$5,968	\$6,143	\$5,783
Total Maintenance (3% inflation)	\$8,734	\$9,739	\$11,785	\$10,587	\$10,689	\$10,415	\$9,866	\$9,075	\$9,330	\$8,958
Total Bridge Deck sq. ft. (1,000)	47,124	47,576	47,373	47,531	47,543	47,567	48,034	50,003	52,417	47,456
Maintenance Cost per sq. ft.	\$0.19	\$0.20	\$0.25	\$0.22	\$0.22	\$0.22	\$0.21	\$0.18	\$0.18	\$0.19

Costs were adjusted to 2017 dollars using a 3 percent annual inflation factor based on historic MnDOT maintenance and operations commodity and labor inflation.

*Table 9: Actual (unadjusted) bridge maintenance costs*

Calendar Year	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Preventive Maintenance Expenditures (\$1,000)	\$3,401	\$3,239	\$3,525	\$3,145	\$3,692	\$2,658	\$2,477	\$2,843	\$3,004	\$3,082
Reactive Maintenance Expenditures (\$1,000)	\$3,098	\$4,225	\$5,778	\$5,463	\$5,260	\$6,326	\$6,289	\$5,462	\$5,790	\$5,615
Total Maintenance	\$6,499	\$7,464	\$9,303	\$8,608	\$8,952	\$8,984	\$8,766	\$8,305	\$8,794	\$8,697
Total Bridge Deck sq. ft. (1,000)	47,124	47,576	47,373	47,531	47,543	47,567	48,034	50,003	52,417	47,456
Maintenance Cost per sq. ft.	\$0.14	\$0.16	\$0.20	\$0.18	\$0.19	\$0.19	\$0.18	\$0.17	\$0.17	\$0.18

Costs are not adjusted for inflation

## Major influencing factors

Budget allocations and the condition of Minnesota's overall bridge system are factors that influence this measure. As the condition of the bridge system trends toward good and satisfactory, preventive maintenance becomes the predominant treatment. As the condition of the bridge system trends toward fair and poor, reactive maintenance needs increase.

Other factors that influence this measure include bridge design type and complexity, traffic control requirements, access and equipment requirements. Because of the numerous contributing factors, the cost per square foot for bridge maintenance is not necessarily directly proportional to the bridge deck area. These costs are very high and are appropriate for monitoring the overall trend.

This report includes only the costs associated with MnDOT-performed preventive and reactive maintenance activities. MnDOT generally self-performs the majority of bridge preservation activities, but future reporting efforts may include contract maintenance work.

## Pavement: Cost per roadway mile-year added

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Preserving the functional and structural integrity of Minnesota's highways is a priority for MnDOT because timely repair and replacement reduces long-term costs and because highway smoothness greatly affects Minnesotans' satisfaction with overall state highway maintenance. MnDOT performs a variety of rehabilitation activities that extend the remaining service life of roadways. Remaining service life is the time in years until the roughness of a pavement section is predicted to reach the point where travelers feel the road is rough. A roadway with zero years of service life remaining can still be driven on, but it has reached the point when some sort of rehabilitation is warranted.

### Measure definition

The pavement productivity measure compares MnDOT's estimated pavement preservation investments against the number of mile-years it adds to Minnesota's trunk highway system for MnDOT's contracted work. Mile-years are defined as the number of miles of roadway that receive treatment in a given year multiplied by the design life (in years) of that treatment. For example, one mile of roadway that receives a fix expected to last 10 years would be calculated as 10 mile-years.

The investment numbers represent MnDOT's contracted work for the following program categories: reconstruction, recondition, resurfacing and road repair. Work performed by MnDOT labor, such as patching pot holes, is not included. A three-year rolling average is used to smooth financial data that is in fiscal years and condition data that is in calendar years. Additionally, any improvement in condition is captured the year after the investment is made.

Figure 4: Three-year Rolling Average 2004-2015 of Cost per Roadway Mile-Year Added (Thousands)



Costs were adjusted to 2017 dollars using the actual annual Pavement Surfacing Index from the MnDOT Construction Cost Index that has been volatile but increased an average of 2 percent per year for the last 10 years.

Rehabilitation activities that extend service life will add a considerable number of years to the remaining service life of a pavement but are typically more costly. Less expensive short-term fixes may increase the pavement smoothness in the near term, but will not add many additional years of remaining service life. This measure provides a way of looking at the makeup of the pavement program. Long life fixes, while adding considerable life to a roadway, are very costly. Fixes with short lives, while fairly inexpensive, do not add much life to the system. A good balance of long and short term fixes is desired. When budgets are tight, the program will trend toward increased miles of low cost, short life fixes, to keep the system in serviceable condition. As funds increase, a greater number of the higher cost, long life fixes can be part of the program.

## Results and analysis

The results through 2015 show the trend in cost per roadway mile-year added is slightly increasing over time. The increasing trend might be related to more items being included in pavement jobs than in previous decades such as culverts, ADA improvements, trails, and shoulder improvements for bicyclists. It should be noted that this measure only includes an analysis of the contracted work that was performed. It does not suggest whether the overall investment in the system is adequate. One must look at the condition of the system, and projected condition based on programmed investment, to see how the system condition is changing over time.

*Table 10: Inflation-adjusted cost per roadway mile-year added*

3-year averages	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012	2011-2013	2012-2014	2013-2015
Pavement Preservation spending (millions)	\$285.3	\$286.8	\$244.5	\$284.7	\$328.4	\$368.2	\$394.5	\$440.0	\$435.0	\$389.3
Mile-Years added (1,000s)	12.4	12.3	10.7	12.5	13.3	15.4	15.5	17.4	16.9	14.6
Cost per roadway mile year added (1,000s)	\$22.9	\$23.3	\$22.8	\$22.8	\$24.7	\$23.9	\$25.4	\$25.3	\$25.3	\$26.6

Costs were adjusted to 2017 dollars using the actual annual Pavement Surfacing Index from the MnDOT Construction Cost Index that has been volatile but increased an average of 2 percent per year for the last 10 years.

*Table 11: Actual (unadjusted) cost per roadway mile-year added*

3-year averages	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012	2011-2013	2012-2014	2013-2015
Pavement Preservation spending (millions)	\$187.6	\$210.9	\$208.7	\$258.3	\$310.4	\$350.8	\$396.6	\$462.8	\$479.1	\$439.4
Mile-Years added (1,000s)	12.4	12.3	10.7	12.5	13.3	15.4	15.5	17.4	16.9	14.6
Cost per roadway mile year added (1,000s)	\$15.1	\$17.2	\$19.5	\$20.7	\$23.3	\$22.7	\$25.6	\$26.7	\$28.4	\$30.1

Costs were not adjusted for inflation.

## Major influencing factors

Inflation in construction costs is a major influencing factor for MnDOT’s construction program. Pavement is especially impacted by inflation since asphalt and concrete prices have increased disproportionately compared to other construction activities and commodities in recent history.

In addition, many pavement projects are chosen due to reasons that are not primarily related to pavement condition. The need to improve safety and/or mobility along a route often is a primary reason the project is selected. Although the pavement is repaired or replaced as part of the project, the cost of the project is higher, in some cases much higher, due to the non-pavement related work, such as culvert or underground drainage structure repairs. This makes it difficult to derive a good relationship between the number of years of life added and the dollar spent on pavement repairs. Some years, MnDOT’s program has more of these types of projects than others, making it difficult to analyze yearly trends. Finally, as new materials and construction techniques are developed, the lives of the various fixes will hopefully increase, when compared to MnDOT’s current methods. If the added cost of the new method provides a substantial increase in pavement life, it will be reflected in this measure.

## Snow and Ice: Cost per Plow-Mile Driven

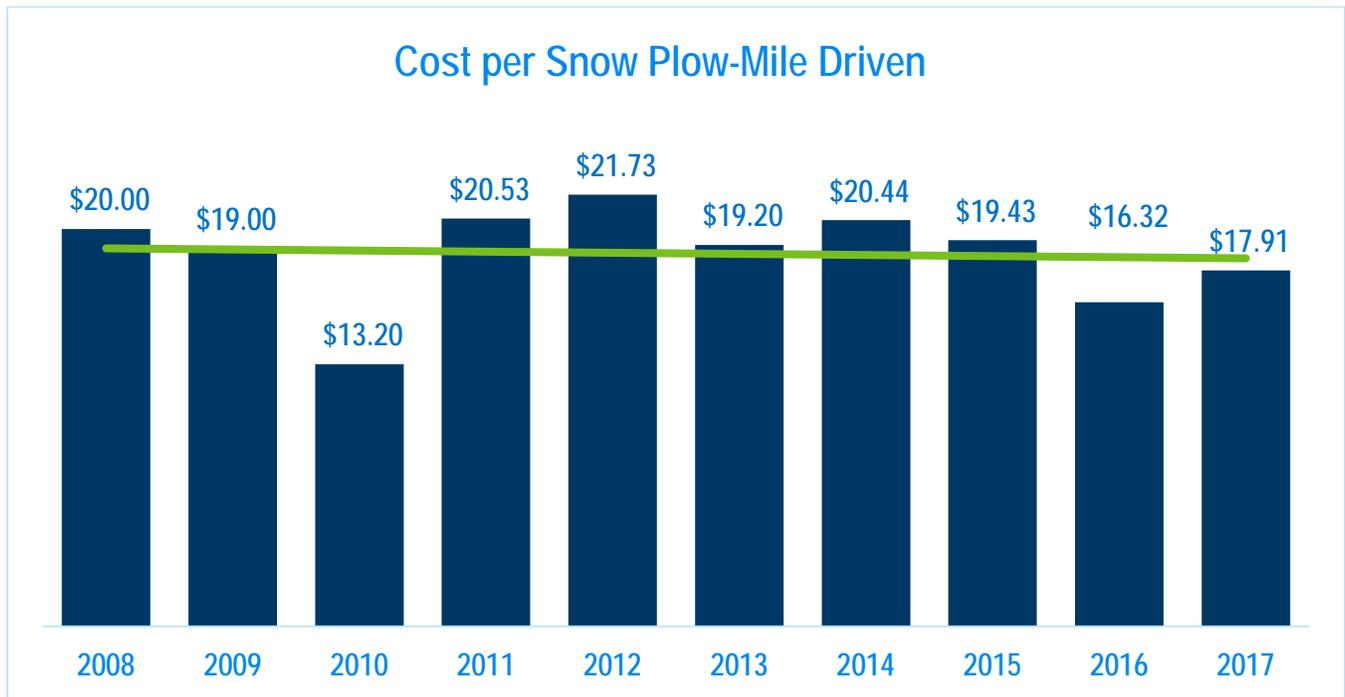
Fast and effective snow and ice control is critically important to Minnesotans' quality of life during the winter months. It preserves mobility, increases traveler safety, reduces damage to vehicles and limits the extent of weather-induced congestion.

The primary goal of MnDOT's snow and ice operations is the safety of Minnesota's traveling public. Citizens expect to be able to carry out normal activities through most weather events and to have transportation facilities that safely accommodate travel shortly after an event has passed. In addition, the snow and ice program works to prevent the accumulation of snow through snow fences and prevent the formation of ice through the application of anti-icing chemicals prior to a snow event.

### Measure definition

The snow and ice productivity measure compares dollars spent on MnDOT's snow and ice program against the number of plow miles driven during the snow and ice season. The data includes miles driven to get to and from routes since those miles are required to deliver snow and ice operations.

Figure 5: State Fiscal Year 2007-2017 Cost per Snow Plow-Mile Driven



Costs were adjusted to 2017 dollars using a 3 percent annual inflation factor based on historic MnDOT maintenance and operations commodity and labor inflation.

### Results and analysis

The chart above shows the cost per plow-mile driven was stable over nine of the last 10 years. The exceptionally low cost per plow-mile driven in SFY2010 is the result of an exceptionally mild winter.

*Table 12: Inflation-adjusted cost per snow plow-mile driven*

State Fiscal Year	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Costs (\$millions)	\$108.9	\$116.1	\$93.3	\$128.0	\$71.9	\$126.4	\$148.9	\$93.3	\$97.0	\$97.0
Plow Miles Driven (1000s)	5,445	6,111	7,068	6,235	3,306	6,583	7,282	4,800	5,943	5,417
Cost per Mile	\$20.0	\$19.0	\$13.2	\$20.5	\$21.7	\$19.2	\$20.4	\$19.4	\$16.3	\$17.9

Costs were adjusted to 2017 dollars using a 3 percent annual inflation factor based on historic MnDOT maintenance and operations commodity and labor inflation.

*Table 13: Actual (unadjusted) cost per snow plow-mile driven*

State Fiscal Year	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Costs (\$millions)	\$83.5	\$91.7	\$75.9	\$107.2	\$62.0	\$112.3	\$136.2	\$87.9	\$94.2	\$97.0
Plow Miles Driven (1000s)	5,445	6,111	7,068	6,235	3,306	6,583	7,282	4,800	5,943	5,417
Cost per Mile	\$15.3	\$15.0	\$10.7	\$17.2	\$18.8	\$17.1	\$18.7	\$18.3	\$15.8	\$17.9

Numbers within the table are not adjusted for inflation.

### Major influencing factors

Major factors that influence expenses are winter severity (number of events, precipitation totals, wind, etc.) and event timing (rush hour and weekend events). To combat these factors MnDOT is increasing efficiency by implementing innovative technologies and practices including tow plows, anti-icing, pre-wetting, de-icing, comprehensive snowfighter training, snow fences and enhanced materials.

## Pavement Markings: Cost per Mile Striped

Pavement markings perform an important function in managing, directing and controlling traffic. In some cases, they are used to supplement the regulations or warnings of other devices, such as traffic signs or signals. Sometimes, they are used alone and produce results that cannot be obtained by the use of any other device.

### Measure definition

The pavement markings productivity measure compares dollars spent marking pavements on Minnesota's trunk highway system against the number of miles striped.

Figure 6: Calendar Year 2007-2016 Cost per Mile Striped



Costs were adjusted to 2017 dollars using a 3 percent annual inflation factor based on historic MnDOT maintenance and operations commodity and labor inflation.

### Results and analysis

Striping cost per mile trends downward over the reporting period, although it does fluctuate from year-to-year due to the influencing factors listed below.

Table 14: Inflation-adjusted cost per mile striped

Calendar Year	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Total Striping Costs (1000s)	\$9,996	\$10,291	\$9,416	\$8,390	\$7,117	\$9,001	\$6,368	\$6,879	\$6,895	\$7,089
Miles Striped (1000s)	16.2	18.7	18	16.1	15	16.7	14.4	15.1	14.7	14.9
Cost per mile	\$617	\$550	\$523	\$521	\$474	\$539	\$442	\$456	\$469	\$476

Costs were adjusted to 2017 dollars using a 3 percent annual inflation factor based on historic MnDOT maintenance and operations commodity and labor inflation.

*Table 15: Actual (unadjusted) cost per mile striped*

Calendar Year	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Total Striping Costs (1000s)	\$7,438	\$7,887	\$7,433	\$6,822	\$5,960	\$7,764	\$5,658	\$6,295	\$6,499	\$6,883
Miles Striped (1000s)	16.2	18.7	18	16.1	15	16.7	14.4	15.1	14.7	14.9
Cost per mile	\$460	\$421	\$414	\$424	\$396	\$466	\$392	\$417	\$442	\$462

Costs were not adjusted for inflation.

### Major influencing factors

Equipment, labor and material costs, along with organization, management, supervision, weather, planning and coordination all influence this measure. The materials used also vary greatly, ranging from less costly and less durable markings such as latex, to the midrange product epoxy, to polymer pre-formed tape, which has a long service life and is used for markings that will be exposed to high levels of roadway traffic.

## Transit: MnDOT Administrative Cost per Transit Passenger Trip

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Transit connects people to jobs, family, schools, shopping, health care centers and sports and cultural events. These systems enhance the mobility of the elderly, low-income and persons with disabilities in communities across the state by providing a reliable transportation option. Transit can be an alternative to driving that can reduce congestion, fuel consumption and greenhouse gas emissions.

Greater Minnesota's 37 public transit systems are operated by local governments and non-profits. MnDOT supports these systems through planning, research, technical assistance, and the management of state and federal transit grants for funding programs that administer capital and operational funding. MnDOT's Transit Office also supports transportation for seniors and individuals with disabilities statewide, contributes a share to Northstar Commuter Rail, and administers federal dollars for transit in the rural parts of the seven-county metro area.

### Measure definition

The Greater Minnesota transit productivity measure compares dollars spent by MnDOT's Transit Office providing grant agreements and overseeing transit fund recipients against the number of passenger trips provided by those grantees. This measure does not capture the total average cost per passenger trip as it does not include local, state and federal dollars granted directly to local transit providers nor does it include funding collected at the fare box.

Figure 7: Calendar Year 2007-2016 Transit Office Administrative Cost per Passenger Trip



Costs were adjusted to 2017 dollars using a 2 percent annual inflation factor based on historic MnDOT labor inflation.

### Results and analysis

The MnDOT Transit Office administrative cost per passenger trip has remained relatively flat over the period of analysis, with moderate fluctuations due to factors listed below.

Table 16: Inflation-adjusted MnDOT administrative cost per transit passenger trip

Calendar Year	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Expenses (\$1,000)	\$3,275	\$2,979	\$3,568	\$3,406	\$3,348	\$3,127	\$3,978	\$4,198	\$3,556	\$3,799
Greater MN Ridership (1,000's)	10,954	12,128	12,216	12,772	13,189	13,368	13,826	13,839	13,920	13,566
Cost per Ride	\$0.30	\$0.25	\$0.29	\$0.27	\$0.25	\$0.23	\$0.29	\$0.30	\$0.26	\$0.28

Costs were adjusted to 2017 dollars using a 2 percent annual inflation factor based on historic MnDOT labor inflation.

*Table 17: Actual (unadjusted) MnDOT administrative cost per transit passenger trip*

Calendar Year	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Expenses (\$1,000)	\$2,687	\$2,493	\$3,045	\$2,965	\$2,973	\$2,832	\$3,675	\$3,956	\$3,418	\$3,725
Greater MN Ridership (1,000's)	10,954	12,128	12,216	12,772	13,189	13,368	13,826	13,839	13,920	13,566
Cost per Ride	\$0.25	\$0.21	\$0.25	\$0.23	\$0.23	\$0.21	\$0.27	\$0.29	\$0.25	\$0.27

Costs were not adjusted for inflation.

### Major influencing factors

Factors that cause fluctuations in MnDOT’s administrative cost per passenger trip include regulatory changes such as the introduction of new grant programs necessitating educational outreach and more intensive oversight, increases and decreases in available funding, and the 2011 state government shutdown. MnDOT’s Transit Office is working to increase cooperation with local providers to improve service for the traveling public and to build transit providers’ administrative capacity to comply with state and federal rules with minimal assistance from MnDOT transit staff.

### Freight: MnDOT Cost per Oversize/Overweight Permit Issued

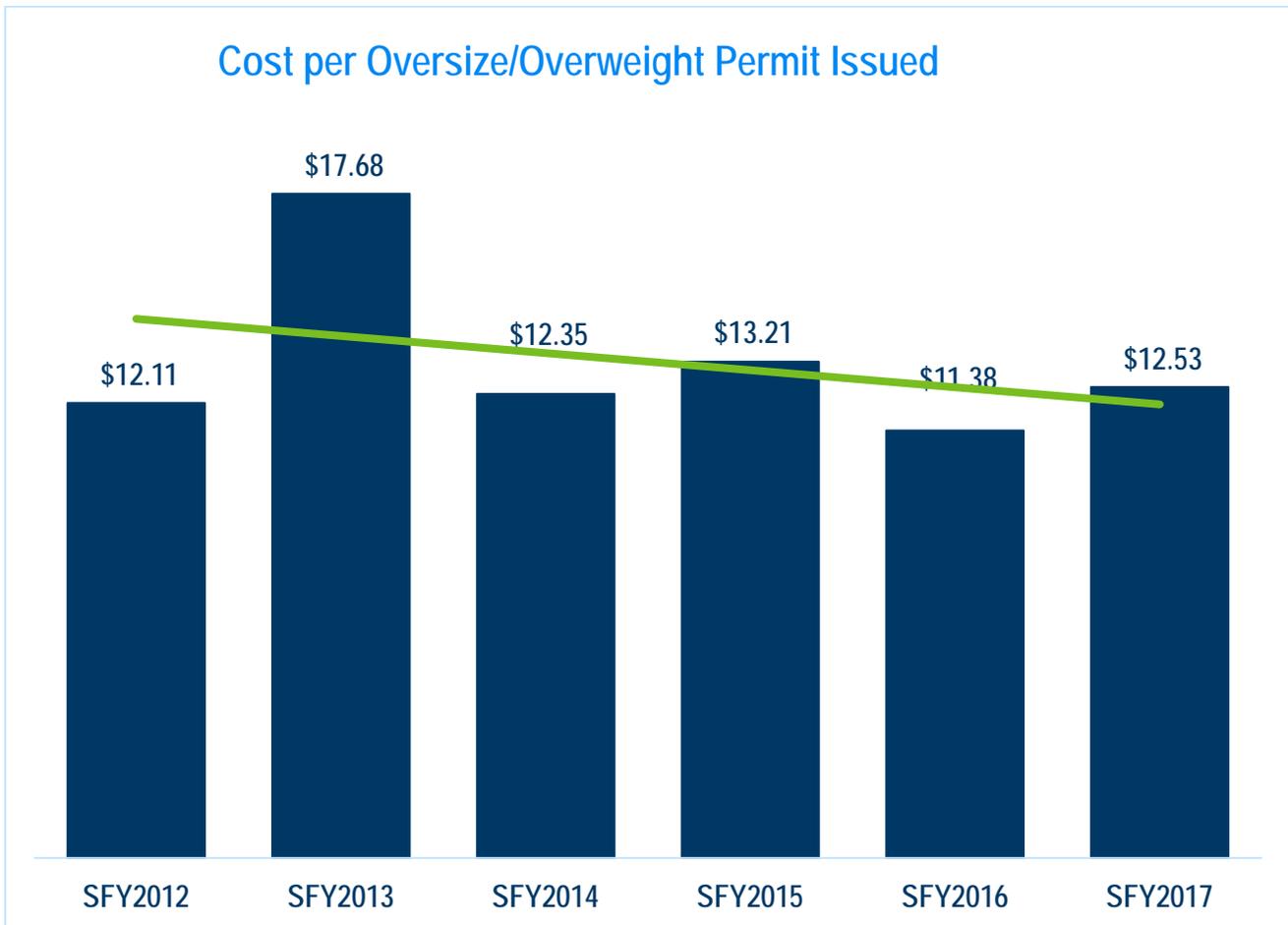
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Oversize/overweight permitting protects and preserves Minnesota’s transportation infrastructure by directing oversized and/or overweight loads toward routes that can safely and efficiently accommodate them, minimizing damage to vulnerable infrastructure. The permitting process benefits freight haulers by helping them identify a compliant route before a truck departs. The permitting process also benefits the public by minimizing the costs of expensive repairs to infrastructure due to damage caused by bridge strikes or damage to pavement from overloading of a roadway or bridge. Applications are currently submitted online, in person, via e-mail or by U.S. mail. Simple applications are typically processed the same day with some online applications processed automatically. For applications requiring special handling due to especially large or heavy loads, the permitting unit conducts a more detailed review, coordinating with relevant engineering and district staff.

### Measure definition

The oversize/overweight permit productivity measure tracks dollars spent processing permit requests and directly supporting that work against total permits issued each year. Note that the average cost per permit will differ significantly between simple permit and those that require special handling.

Figure 8: Inflation-adjusted MnDOT Administrative Cost per Oversize/Overweight Permit Issued



Costs were adjusted to 2017 dollars using a 2 percent annual inflation factor based on historic MnDOT labor inflation.

### Results and analysis

The cost per oversize/overweight permit issued trended slightly downward over the last six state fiscal years. A notable exception to the downward trend was the spike in SFY2013 that was due to significant enhancements to the permitting software and changes to the payment service. Comparable data is not available for fiscal years prior to 2012 due to a change in accounting systems that year (from MAPS to SWIFT).

Table 18: Inflation-adjusted MnDOT administrative cost per oversize/overweight permit issued

State Fiscal Year	2012	2013	2014	2015	2016	2017
Expenses (\$1,000)	\$1,078	\$1,597	\$1,108	\$1,149	\$946	\$980
Permits Issued	89,028	90,372	89,679	86,969	83,093	78,237
Cost per Permit	\$12.11	\$17.68	\$12.35	\$13.21	\$11.38	\$12.53

Costs were adjusted to 2017 dollars using a 2 percent annual inflation factor based on historic MnDOT labor inflation.

*Table 19: Actual (unadjusted) MnDOT administrative cost per oversize/overweight permit issued*

State Fiscal Year	2012	2013	2014	2015	2016	2017
Expenses (\$1,000)	\$977	\$1,476	\$1,044	\$1,104	\$927	\$980
Permits Issued	89,028	90,372	89,679	86,969	83,093	78,237
Cost per Permit	\$10.97	\$16.33	\$11.64	\$12.70	\$11.16	\$12.53

Costs were not adjusted for inflation.

### Major influencing factors

Factors that cause fluctuations in MnDOT’s administrative cost per oversize/overweight permit issued include:

- total number of permit applications received
- volume of applications submitted by mail, fax, or telephone versus through an online application
- development or purchase of technology that improves the application or route analysis process
- the mix of simple permit applications versus those requiring special handling
- availability of routes for oversized or overweight vehicles on Minnesota’s trunk highway network

For loads big or heavy enough to require special handling, incremental increases to a load’s size or weight can substantially increase the complexity of a permit.

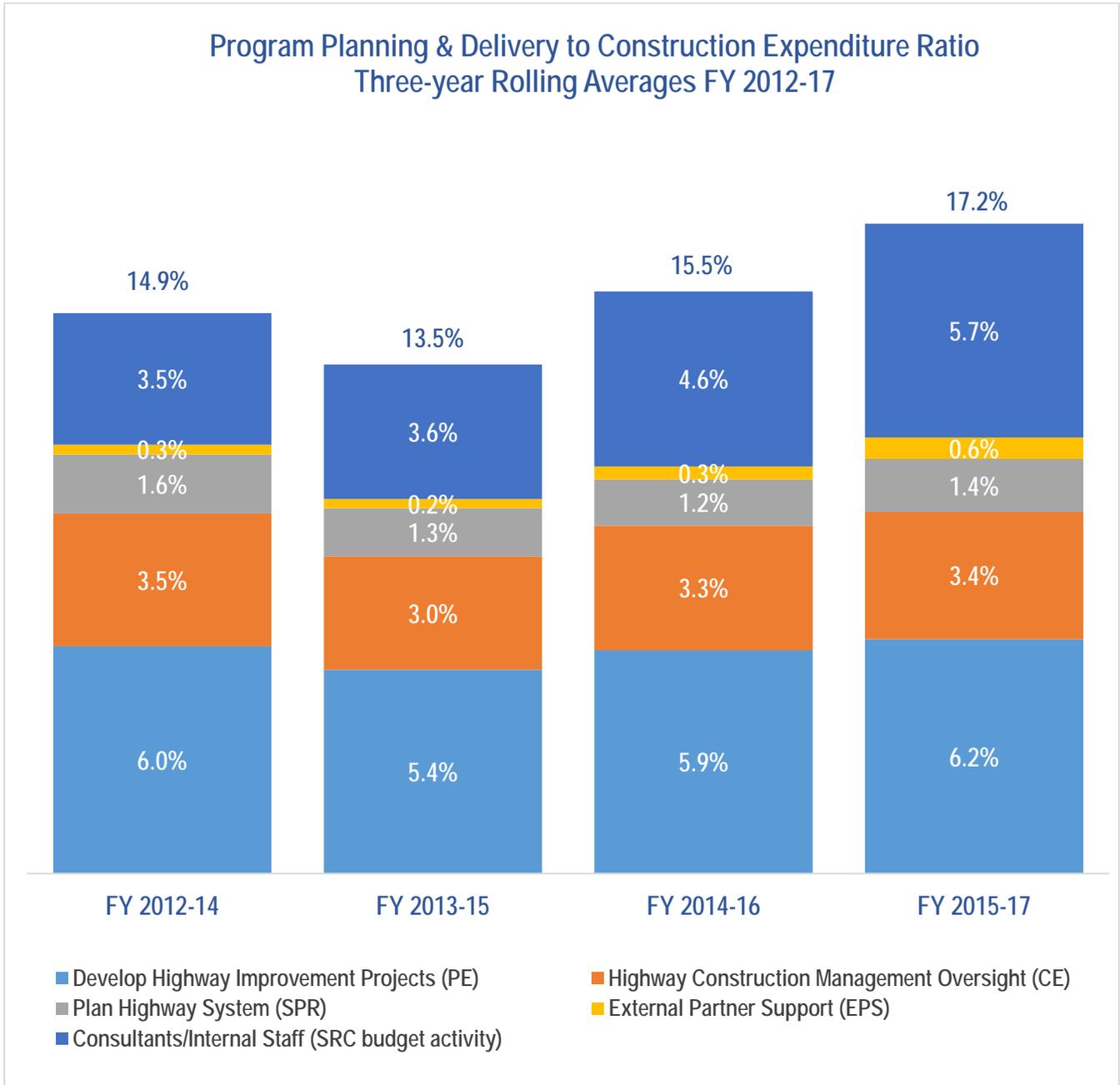
## Program Planning and Delivery to Construction Expenditure Ratio

MnDOT manages and delivers the State Road Construction or SRC program. This includes planning at the state and district levels and developing and managing state highway projects from project initiation through completion of construction. MnDOT employees perform the majority of program planning and delivery activities, however consultants are regularly contracted to plan and lead projects. Program planning and delivery includes preliminary engineering, design, construction contract administration, and indirect costs associated with delivering MnDOT’s construction program. Private contractors typically construct SRC projects. For this measure, consultant led program planning and delivery costs are subtracted from SRC expenditures and added into program planning and delivery expenditures.

### Measure Definition

The program planning and delivery to construction expenditure ratio examines dollars spent on program planning and delivery and compares the amount to construction expenditures\*(see note under chart). For this measure, consultant-led program planning and delivery costs are subtracted from SRC expenditures and added into program planning and delivery expenditures. Three-year rolling averages are calculated for this measure because projects typically require multi-year planning and construction expenditures.

Figure 9: Fiscal Year 2012-2017 Program Planning & Deliver to Construction Expenditure Ratio



\* Throughout this measure, expenditures reflect budgetary commitments (expenditures and encumbrances) and include consultant-led program planning and delivery. Program delivery expenditures were adjusted to 2017 dollars using a 2 percent annual inflation rate. Construction expenditures were adjusted to 2017 dollars using the actual annual MnDOT Construction Cost Index that has been volatile but increased an average of -2 percent per year for the last 10 years.

*Table 20: Inflation-adjusted planning and delivery to construction expenditure ratio*

FISCAL YEAR	2012-14	2013-15	2014-16	2015-17
Develop Highway Improvement Projects (\$1,000)	\$60,896	\$68,415	\$75,271	\$78,484
Highway Construction Management Oversight (\$1,000)	\$35,449	\$38,054	\$42,138	\$42,655
Plan Highway System (\$1,000)	\$15,828	\$16,098	\$15,558	\$17,711
External Partner Support (\$1,000)	\$2,668	\$3,150	\$4,375	\$7,209
Consultants (SRC budget activity) (\$1,000)	\$35,195	\$45,123	\$59,056	\$71,546
Program Planning and Delivery Expenditures (\$1,000)	\$150,035	\$170,840	\$196,398	\$217,604
State Road Construction Expenditures (\$1,000)	\$1,008,378	\$1,264,161	\$1,270,871	\$1,261,666
Program Delivery Expenditure/Construction Expenditure Ratio	14.90%	13.50%	15.50%	17.20%

Expenditures reflect budgetary commitments (expenditures and encumbrances) of direct costs and include consultant-led program planning and delivery. Program delivery expenditures were adjusted to 2017 dollars using a 2 percent annual inflation rate. Construction expenditures were adjusted to 2017 dollars using the actual annual MnDOT Construction Cost Index that has been volatile but increased an average of 2 percent per year for the last 10 years.

*Table 21: Unadjusted planning and delivery to construction expenditure and ratio*

FISCAL YEAR	2012-14	2013-15	2014-16	2015-17
Develop Highway Improvement Projects (\$1,000)	\$66,088	\$72,539	\$78,185	\$80,239
Highway Construction Management Oversight (\$1,000)	\$38,388	\$40,397	\$43,828	\$43,528
Plan Highway System (\$1,000)	\$17,163	\$17,116	\$16,197	\$18,036
External Partner Support (\$1,000)	\$2,862	\$3,352	\$4,545	\$7,279
Consultants (SRC budget activity) (\$1,000)	\$38,014	\$47,809	\$61,278	\$72,823
Program Planning and Delivery Expenditures (\$1,000)	\$162,514	\$181,213	\$204,033	\$221,906
State Road Construction Expenditures (\$1,000)	\$999,526	\$1,187,767	\$1,161,055	\$1,179,003
Program Delivery Expenditure/Construction Expenditure Ratio	16.30%	15.30%	17.60%	18.80%

Expenditures reflect budgetary commitments (expenditures and encumbrances) and include consultant-led program planning and delivery. Costs were not adjusted for inflation.

## Results and analysis

The graph above shows the program planning and delivery to construction expenditures ratio in three-year averages from 2012-2017, broken out by products and services. Comparable data is not available for fiscal years prior to 2012 due to a change in accounting systems that year (from MAPS to SWIFT).

Adjusted for inflation, the three-year rolling average program planning and delivery to construction expenditure ratio is between 14.9 and 17.2 percent. In other words, to deliver the construction program, MnDOT spends \$0.15 and \$0.17 in program planning and delivery direct expenditures for every dollar of construction expenditure.

The direct expenditures refer to labor, equipment and materials that are specifically related to the program, planning and delivery activities, such as design and preliminary engineering. Indirect costs of delivering MnDOT's construction program, such as time charged to customer service, public outreach and feedback, governance and consultant management activities are not included. These costs are generally unique to a public agency.

### **Major influencing factors**

Program delivery expenditures such as scoping, environmental review and design typically precede construction expenditures, frequently by several years. Therefore the program delivery expenditures do not exactly line up with the construction program delivered in the same year. The agency is using a three-year rolling average for this measure because projects typically require multi-year planning and construction expenditures. In addition, funding fluctuates. Construction funding increased with one-time programs such as Corridors of Commerce, the American Recovery and Reinvestment Act and the 2008 Chapter 152 bridge-bonding program. In the recent past, MnDOT increased its investment in program planning and delivery for the accelerated development of projects. The three-year rolling average reduces the influence of fluctuating appropriations on the delivery/construction ratio.

While inflation affects all measures, this one includes diverging costs. Labor costs are rising at lower rates than construction costs. If all else is equal, this adjustment would show increasing efficiency over time. There are other factors that could influence this ratio as well; for example, an increased level of effort due to added statutory or regulatory requirements such as endangered species and stormwater treatment.

# Efficiencies

MnDOT aims to be a good steward of public funds. Starting in 2015, the department decided to take a more targeted approach to identify and quantify these efficiencies, while looking for additional best practices and improvements. In fiscal year 2017, MnDOT identified an estimated \$83 million in savings from new and revised practices deployed across the organization. Including fiscal year 2015 savings, MnDOT achieved an estimated \$154 million in saving from these practices over the previous two fiscal years. The majority of these efficiencies identified in FY 2017 came from construction program delivery and project development. Savings identified in the analysis led to program and project costs that were lower than if the efficient strategies were not implemented.

## Background

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Before embarking on the fiscal year 2015 analysis, MnDOT conducted research on efficiency measurement throughout the country looking at other state DOTs. There were, at the time, three state DOTs that report their overall department efficiencies to the public in a manner similar to the approach chosen for Minnesota: Florida, Utah and Missouri. Florida and Utah highlight illustrative examples of efficiency on a case by case basis. Missouri's efficiency and performance measurement tracker summarizes its savings by benchmarking its use of practical design', innovation and value engineering. Missouri also analyzes how savings from construction bids that come in lower than estimated are reallocated. MnDOT uses an approach similar to that of Missouri.

Compared to other states, MnDOT is conservative in its efficiency measurement by only tracking savings that are directly attributed to deliberate decisions in planning, project management and delivery that advance efficient outcomes. Although external market forces can have an impact on MnDOT's ability to stretch each dollar further, the agency is not counting savings that can be attributed to external market forces in this analysis.

## Methodology

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### Overview

MnDOT analyzes and evaluates its performance in a number of different ways to measure overall organizational effectiveness. MnDOT evaluates the conditions and service levels being provided to the public through its traditional performance measures.

Although efficiency is always a consideration, there are other priorities MnDOT considers such as equitably providing transportation access regardless of geographic location. The ability to maximize efficiency is often limited by the more significant directive to equitably provide transportation services to all Minnesotans. This is a charge that is not easily measured using traditional performance measures.

To add to traditional performance measures, MnDOT is evaluating and identifying the efficiency with which it operates. Efficiency measurement looks at an organization's ability to maximize the output from a given set of input resources.<sup>1</sup> There are different ways to identify and evaluate levels of efficiency, each with its own strengths and weaknesses. Benchmarking best practices is a common tool for identifying best cases given certain constraints. It analyzes what has worked, why it has worked, in what conditions it has worked, and how it may

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<sup>1</sup> Palmer, A. (1993). Performance Measurement in Local Government. *Public Money & Management*, 31-36.

work in the future.<sup>2</sup> The analysis looks to isolate key decisions and strategies that are maximizing outputs without compromising outcomes to the public.<sup>3</sup>

Internal efficiencies are essentially all the ways MnDOT maximizes the use of financial resources through deliberate decisions and business processes that allow the agency to directly save money, avoid costs or provide a higher quality outcome. Efficiencies that provide cost savings and cost avoidance are pursued as long as they do not compromise the organization's legal requirements or the quality of the final product delivered. The evaluation analyzes internal efficiencies and also looks to note decisions that affect the public, but that may limit the organization's options in saving money. Strategic choices that do not provide cost savings, but still enhance MnDOT's service to the public are noted as external impacts in the individual project reports.

## Data Limitations

MnDOT is required to evaluate the efficiency of the organization each fiscal year and report on the efficiencies that occurred in the previous two fiscal years. Projects usually take years to be developed, so to identify efficient practices that have produced programmatic savings in the current fiscal year, the department analyzed practices and processes that were implemented in previous years after the initial scoping process was completed, which impacted the overall project cost. For example, projects under construction in fiscal year 2017 were in development for six to 10 years. Many of the decisions have already been made that would lead to significant project savings.

## Approach

MnDOT used a best practice case-analysis approach to evaluate and measure efficiency. Best practice evaluation reviews dimensions of efficiency in quality, time and cost.<sup>4</sup> It analyzes what has worked, why it has worked, in what conditions it has worked, and how it may work in the future.<sup>5</sup> MnDOT analyzed each case for implementation of cost saving strategies, designs and processes. Efficiencies were determined by evaluation against the sample of cases across the state. Best cases were determined by comparison of the standard approaches being employed.

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| <ol style="list-style-type: none"><li>1. A comparative process</li><li>2. An action</li><li>3. A linkage between the action and an outcome or goal</li></ol> |
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Figure 10: Best practice evaluation components (Bretschneider, Marc-Aurele, & Wu, 2005)

MnDOT is a large organization serving a diverse mission for the state of Minnesota. Strategic decisions and changes to business processes made in one part of the organization often have effects on other parts of MnDOT. To account for this, efficiency measurement was separated into two key areas of the organization to ensure efficiencies are not quantified more than once.

- **State Road Construction:** development and delivery of construction projects that are funded through Minnesota's state road construction budget
- **Administration, Maintenance & Operations:** the administration of the organization including all daily maintenance, long term maintenance and operation of transportation systems

State Road Construction was analyzed for efficiency at the project level, while all other business lines were evaluated at a program level. This distinction reflects where critical decisions are being made and the financial

<sup>2</sup> Behn, R. D. (1993). Case-analysis research and managerial effectiveness. *Public management: The state of the art*, 40-54.

<sup>3</sup> Holzer, Ph.D., M., Fry, J., Charbonneau, E., Riccucci, Ph.D., N., Kwak, S., & Burnash, E. (2009). *Literature Review and Analysis Related to Measurement of Local Government Efficiency*.

<sup>4</sup> Bretschneider, S., Marc-Aurele, F. J., & Wu, J. (2005). "Best Practices" Research: A Methodological Guide for the Perplexed. *Journal of Public Administration Research and Theory*, 307-323.

<sup>5</sup> Behn, R. D. (1993). Case-analysis research and managerial effectiveness. *Public management: The state of the art*, 40-54.

magnitude of those decisions. Transportation construction projects cost millions of dollars with each one involving complex tradeoffs and design considerations that can affect a project's cost by hundreds of thousands of dollars.

Administration, Maintenance and Operations were analyzed for efficiency at the program level. Efficient strategies and business process improvements were evaluated against former approaches. To have a basis for comparison, only emerging strategies that began scaling after the Chapter 152 program in 2008 were used. The efficiencies were analyzed for cost savings by calculating the present value of the approach being taken inclusive of the upfront costs and ongoing cost savings.

Below are the best practice areas that were identified in the efficiency analysis:

#### State Road Construction

- Pavement Design Methodology
- Performance-based Practical Design
- Innovative Construction Staging
- Value Engineering
- Alternative Technical Concepts

#### Administration, Maintenance and Operation

- Automated Flagger Assistance Devices
- Dynamic Message Sign Defrosters
- LED Ramp Meters
- LED Roadway Lighting
- Maintenance Decision Support System
- MnPASS Contracting
- MnSTEP
- Portable Signals
- Tow Plows
- Printing Business Practices
- Georilla
- Living Snow Fences
- Connecting MnDOT Facilities by Fiber Optic Network
- Conversion of Fiber Optic Communication Standard
- Importing Sign Data into CAD
- Slurry Tanks
- Ag Tractor Rental Program
- Wood Post Cold Storage Building

## State Road Construction

Efficiencies identified in fiscal year 2017 came throughout project development for each project worth more than \$10 million and any regionally significant project let in FY 2017. Savings identified in the analysis led to project costs that were lower than if the efficient strategies were not implemented.

MnDOT employs a number of strategies to reduce the overall cost of the projects before delivery. The analysis looked at key business processes directly linked to more efficient project delivery. The projects were evaluated on how well the business process improvements were implemented. The five areas linked to more efficient outcomes are: improved Pavement Design Methodology, Performance-Based Practical Design, Innovative Construction Staging, Value Engineering, and Alternative Technical Concepts. A summary of the savings on major projects can be found below.

*Table 22: State Road Construction Efficiencies by Method for FY2016 and FY 2017*

SRC Savings Area	FY 2016	FY 2017
Pavement Design Methodology	\$9,072,175	\$6,410,000
Performance-Based Practical Design	\$34,815,205	\$39,200,000
Innovative Construction Staging	\$4,340,000	\$3,930,000
Value Engineering	\$10,153,350	\$17,885,000
Alternative Technical Concepts	\$1,571,325	\$3,490,000
<b>Total Savings</b>	<b>\$59,952,055</b>	<b>\$70,915,000</b>

*Table 23: Total Detailed Efficiency Savings for the State Road Construction program for FY 2017*

Project	Total Estimated Efficiency Savings
<b>Hwy 1 - Reconstruction, Grade Surface and Passing Lane (5.7 Miles)</b>	<b>\$5,510,000</b>
Pavement Design Methodology	\$385,000
Performance-based Practical Design	\$625,000
Value Engineering	\$4,500,000
<b>I-35 - Pavement Rehabilitation and Rest Area Improvements</b>	<b>\$1,910,000</b>
Pavement Design Methodology	\$1,475,000
Performance-based Practical Design	\$435,000
<b>Hwy 2 - Bridge Rehabilitation (Red River, Grand Forks)</b>	<b>\$3,750,000</b>
Performance-based Practical Design	\$3,000,000
Value Engineering	\$750,000
<b>Hwy 2 - Bemidji Bypass - Pavement Rehabilitation and Bridge Repair (21.5 miles)</b>	<b>\$615,000</b>
Performance-based Practical Design	\$450,000
Innovative Construction Staging	\$165,000
<b>Hwy 10 - Bridge Replacement over Lake Orono, Roadway Reconstruction</b>	<b>\$525,000</b>
Performance-based Practical Design	\$425,000
Innovative Construction Staging	\$100,000

Project	Total Estimated Efficiency Savings
<b>Hwy 25 - Pavement Rehabilitation, Drainage, and Safety Improvements (17.5 miles)</b>	\$260,000
Pavement Design Methodology	\$175,000
Innovative Construction Staging	\$85,000
<b>Hwy 12 - Pavement Rehabilitation, Drainage, Safety Improvements and Snow Fencing (15 miles)</b>	\$725,000
Performance-based Practical Design	\$725,000
<b>Hwy 59 - Pavement Rehabilitation, Drainage, Safety Improvements and Turn Lanes (36 miles)</b>	\$500,000
Performance-based Practical Design	\$435,000
Innovative Construction Staging	\$65,000
<b>Hwy 52 - Pavement Overlay, Safety Improvements, Drainage and Turn Lanes (27 miles)</b>	\$390,000
Pavement Design Methodology	\$275,000
Innovative Construction Staging	\$115,000
<b>Hwy 63 - Red Wing Bridge Replacement And Approach Roadways</b>	\$24,835,000
Performance-based Practical Design	\$22,250,000
Innovative Construction Staging	\$2,500,000
Value Engineering	\$85,000
<b>Hwy 15 - Pavement Rehabilitation, ADA Improvements, Drainage and Signals</b>	\$175,000
Pavement Design Methodology	\$125,000
Performance-based Practical Design	\$50,000
<b>Hwy 22 - Pavement Reconstruction, Drainage, Turn Lanes and Bridge Replacement (10.5 miles)</b>	\$1,387,000
Pavement Design Methodology	\$625,000
Performance-based Practical Design	\$712,000
Innovative Construction Staging	\$50,000
<b>Hwy 60 - Roadway Reconstruction, Grading, Drainage 2-lane to 4-lane Conversion (8 miles)</b>	\$1,518,000
Pavement Design Methodology	\$400,000
Performance-based Practical Design	\$968,000
Innovative Construction Staging	\$150,000
<b>Hwy 14 - Turnback - Pavement Reconstruction, Drainage, Utilities (3 miles)</b>	\$450,000
Pavement Design Methodology	\$250,000
Performance-based Practical Design	\$200,000
<b>Hwy 22 - Pavement Rehabilitation (12 miles)</b>	\$1,350,000
Performance-based Practical Design	\$1,350,000
<b>Hwy 169 - Pavement Rehabilitation, Grading, Drainage, Bridge Replacement - Design Build</b>	\$11,775,000
Innovative Construction Staging	\$75,000
Value Engineering	\$9,800,000
Alternative Technical Concepts	\$1,900,000
<b>I-35 - Pavement Rehabilitation, Bridge Replacement, Drainage and DDI Interchange</b>	\$1,590,000
Alternative Technical Concepts	\$1,590,000
<b>I-94 - Pavement Rehabilitation, Drainage, Safety Improvements, Tunnel Repairs</b>	\$3,800,000
Pavement Design Methodology	\$300,000
Performance-based Practical Design	\$1,500,000
Value Engineering	\$2,000,000

Project	Total Estimated Efficiency Savings
<b>I-35W - Corridor Reconstruction, Bridge Replacement, Grading, Drainage, Transit and ITS</b>	<b>\$9,850,000</b>
Pavement Design Methodology	\$2,400,000
Performance-based Practical Design	\$6,075,000
Innovative Construction Staging	\$625,000
Value Engineering	\$750,000
<b>Grand Total</b>	<b>\$70,915,000</b>

Note: Two other projects were reviewed but no quantifiable efficiencies were identified.

Identified estimated savings reflect costs that were lower than if the efficient strategies were not implemented. The estimated savings identified in FY 2017 were the product of decisions made throughout project development – often over the course of many years. It was not feasible to retroactively calculate where each estimated dollar was repurposed. The agency is working to develop tracking software to better calculate the movement of funds during project development, but at this time it is not equipped to measure at that level of detail. Additionally, actions were evaluated once a project was selected for construction. Decisions being made before a project was selected to be built were deemed to be too abstract to determine causal relationships between actions and more efficient outcomes.

## Pavement Design Methodology

In 2015, MnDOT began implementing a new pavement design strategy for its MnPAVE flexible pavement design. Based on findings from Minnesota’s Cold Weather Pavement Testing facility, also known as MnROAD, concrete pavement depths were recalibrated to reduce concrete pavement thickness without sacrificing the life of the pavement. This new calibration allows MnDOT to resurface pavements with the thinnest layers possible while maintaining the service life and smooth ride expected. With the new Pavement Design Methodology, paving projects let in FY 2017 saved an estimated \$6.4 million.

## Performance-Based Practical Design

Performance-based design uses sophisticated analytical tools, flexible design criteria and a value-conscious approach to balance competing objectives, optimize return on investment, and increase local and system-level performance. It uses in-depth analysis and risk assessment to more closely scrutinize the use of funds and the effects on resources and communities. It focuses on building only what is needed while maintaining and improving safety. This is done by scoping projects to stay within the core purpose and need. By eliminating nonessential project design elements, the resulting project is lower cost and has improved return on investment. Through implementation of Performance-based Practical Design, projects let in FY 2017 saved an estimated \$39.2 million.

## Innovative Construction Staging

MnDOT is working to reduce the need to purchase permanent and temporary property. These acquisitions can be costly. Acquiring property can be so costly that project managers are increasingly using innovate staging strategies to help reduce and mitigate MnDOT’s project costs, including the manner in which property is purchased. Through implementation of Innovative Construction Staging, projects let in FY 2017 saved an estimated \$3.9 million.

## Value Engineering

Value Engineering is a systematic process using a team of people from a variety of disciplines to improve the value of a project. Value can be increased by either improving the function or reducing the cost, while maintaining the safety, necessary quality and environmental attributes of the project. The VE process incorporates, to the extent possible, the values of design; construction; state, local, and federal approval agencies; other stakeholders; and the public. Cost savings, risk reduction, schedule improvements, improved design and quality are common outcomes of VE studies. Through implementation of Value Engineering practices, projects let in FY 2017 saved an estimated \$17.9 million.

## Alternative Technical Concepts

Alternative Technical Concepts allow for innovation and flexibility during the bidding process. The ATC process allows design-build firms to propose “equal or better” alternatives to the project requirements during the bidding process. The process is used to allow innovation and flexibility in the design and/or construction of a particular element of the project. Through implementation of ATC, projects let in FY 2017 saved an estimated \$3.5 million.

## Administration, Maintenance & Operations

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Emerging strategies and business process improvements were evaluated at a program level. Specific actions were evaluated in comparison to the former approach. Only emerging strategies that were implemented after the adoption of the Chapter 152 program in 2008 were evaluated. An interdisciplinary team of engineers, planners and performance measurement staff evaluated these emerging strategies. They evaluated new approaches being taken, compared them to former processes, and determined if a link existed between the new approach and a more efficient outcome. Efficiencies were analyzed for cost savings by calculating the present value of the approach being taken inclusive of the upfront costs and ongoing cost savings. The costs and savings were then distributed over the life cycle of the new approach (10 years unless otherwise noted). Summaries of the areas reviewed are listed in the following table.

*Table 24: Total Efficiency Savings for the Administration, Maintenance and Operations*

Program	Total Estimated Efficiency Savings (in 2016 Dollars) FY 2016	Total Estimated Efficiency Savings (in 2017 Dollars) FY 2017
Automated Flagger Assistance Devices	\$13,000	\$13,000
Dynamic Message Sign Defrosters	\$120,000	\$120,000
LED Ramp Meters	\$66,000	\$66,000
LED Roadway Lighting	\$2,600,000	\$2,600,000
Maintenance Decision Support System	\$5,800,000	\$6,000,000
MnPASS Contracting	\$200,000	\$200,000
MnSTEP	\$130,000	\$140,000
Portable Signals	\$100,000	\$100,000
Tow Plows	\$680,000	\$780,000

Program	Total Estimated Efficiency Savings (in 2016 Dollars) FY 2016	Total Estimated Efficiency Savings (in 2017 Dollars) FY 2017
Printing Business Practices	\$9,100	\$20,000
Georilla	\$180,000	\$210,000
Blowing Snow Control	\$670,000	\$760,000
Slurry Tanks	\$45,000	\$55,000
Connecting MnDOT Facilities	\$230,000	\$240,000
RTMC Cost Savings (Sonet to IP)	\$180,000	\$180,000
Sign Placement Tool	\$11,000	\$20,000
Ag Tractor Rental Program		\$450,000
Wood Post Cold Storage Building		\$50,000
<b>TOTAL</b>	<b>\$11,034,100</b>	<b>\$12,004,000</b>

Efficiencies identified in FY 2017 led to administrative, maintenance and operations costs that were lower than if the efficient strategies were not implemented. Staff time savings were reallocated to administrative, maintenance and operational priorities. Capital savings such as snow plow purchases avoided through the use of tow plows allowed MnDOT to reinvest in needed capital priorities. All 2016 efficiencies carried forward in 2017 have a background inflation factor applied. Some have increased due to this inflation factor while others may appear unchanged due to rounding.

### Automatic Flagger Assistance Devices

Automated Flagger Assistance Devices are portable traffic control devices with a stop sign and gate that require an operator. The devices are used by flagging personnel instead of traditional flagging equipment. The deployment of AFADs increases safety and efficiency of flagging operations. Efficiencies are realized through the reduction of personnel needed for flagging operations. For example, where a traditional flagging operation requires four people, a flagging operation using AFADs may require only one or two people. The reduction in personnel required for flagging allows for reassignment of people to other aspects of the scheduled work, resulting in quicker turn around and faster project completion. There were no significant changes to AFAD use in 2017. Including all associated costs to implement this program, MnDOT is saving an estimated \$13,000 a year by using AFADs.

### Dynamic Message Sign Defrosters

Dynamic Message Signs were originally designed with defrosters because of the potential for frost and condensation to cause problems with the electronics and reduce the readability of the displays. Metro freeway operations staff analyzed the cost of electricity for using the defrosters, contacted sign manufacturers for recommendations based on experience with deployments in similar climates and conducted tests on a limited number of the DMS. The results showed DMS operate well without any long term maintenance impacts without using the defrosters. There were no changes to the DMS efficiency in 2017. Including all associated costs to implement, MnDOT is saving an estimated \$120,000 a year.

### LED Ramp Meters

The installation of low-maintenance LED bulbs on Twin Cities ramp meters reduced electricity usage and freed staff to do other preventative maintenance work. MnDOT replaced all incandescent bulbs in its 430 ramp meter signal locations with longer service life and higher efficiency LED bulbs. Each ramp meter location has 12 individual

bulbs. There is an initial cost outlay for the LED installations, but the savings in electrical utility cost and elimination of the need to replace bulbs over the service life of the ramp metering infrastructure is greatly offset.

This efficiency continued in 2017 with no changes. For purposes of this analysis a 20-year life cycle is anticipated; so, including all associated costs to implement, MnDOT is saving an estimated \$66,000 a year through the use of LEDs on ramp meters.

## Conversion to LED Roadway Lighting

The statewide LED lighting conversion project involves converting more than 28,500 roadway lights from traditional high-pressure sodium to LED or light emitting diode technology. LED lights have an average life of about 18 years, whereas the life of a sodium bulb is only about four years. The conversion includes replacing both light fixtures and bulbs. Financial impacts will include a sizeable reduction in energy costs and the elimination of labor and equipment costs for the replacement of bulbs every four years. In 2017 MnDOT converted an additional 1,250 lights in Greater Minnesota, bringing totals to approximately 6,250 lights in Greater Minnesota and 18,500 lights in the Twin Cities Metro area. The entire conversion is anticipated to be complete by 2020. For purposes of this analysis a 17-year life cycle is anticipated. Average annual savings for MnDOT will be approximately \$2.6 million.

## MDSS

The Maintenance Decision Support System, Mobile Data Computers and Automated Vehicle Location are the three technologies that together provide critical information about real-time weather and pavement condition for the most efficient distribution of drivers and equipment for roadway maintenance. The most useful application of MDSS is during snow and ice clearance. The MDSS assists drivers with determining the correct amount of material to apply to the roadway surface, which is usually significantly less than most plow drivers would normally apply. In addition to minimizing environmental impacts of salt and chemical usage, the MDSS also presents significant financial savings for the department. MDSS was fully operational in 2016 on approximately 600 plow trucks. The number of trucks with MDSS capabilities grew to 642 in 2017. By 2020 MnDOT's entire snow plow fleet will be outfitted with MDSS. Including all associated costs to implement, MDSS is generating an estimated \$6 million in annual savings.

## MnPASS System

The MnPASS system was an innovative conversion of an existing High Occupancy Vehicle lane with a first of its kind dynamic pricing component. This system carefully regulates the number of paying single occupant vehicles within these lanes. For purposes of this analysis the benefit calculated is based on MnPASS's five-year contract life. Including all associated costs to implement, MnDOT is saving an estimated \$200,000 a year compared to using an old system on this new business process. This efficiency remains unchanged in 2017.

## MnSTEP—MnDOT Stretching Together Employee Program

An aging workforce, rising workers' compensation costs, and increasingly sedentary lifestyles among workers are just some of the challenges that Safety & Loss professionals face while trying to keep employees' safe and costs under control. In 2010 MnDOT's District 3 implemented an employee flexibility program in an effort to: achieve a safe and healthy workplace, reduce the risk of overexertion injuries, increase work performance and reduce workers' compensation costs. After implementation of the program, recordable injuries decreased by 44 percent, lost time injuries decreased by 45 percent, and overexertion injuries dropped by 62 percent. By reducing these types of injuries, average annual workers' compensation costs were down 47 percent and the number of claims were down 32 percent. For purposes of this analysis a five-year life cycle is anticipated. Including all associated costs to implement, MnDOT's District 3 is saving an estimated \$140,000 a year by instituting MnSTEP.

## Portable Signals

Portable Signal Systems are traffic control devices used instead of traditional flagging personnel and equipment. Once set up, portable signals work without an operator and can be left in place overnight. Efficiencies are realized through the elimination of personnel needed to flag traffic through a work area. The reduction in required personnel for flagging allows for reassignment of people to other projects, resulting in quicker turn around and faster project completion. Including all associated costs to implement, MnDOT is saving an estimated \$100,000 annually by using portable signal systems. This efficiency remains unchanged in 2017.

## Tow Plows

The operational gap of snow plow trucks needed to deliver snow and ice removal services versus the number of snow plow trucks available in the fleet is partially addressed by outfitting an existing tandem axle truck with an unmanned tow plow. A tow plow is a 26-foot plow that is mounted on a trailer pulled by a tandem axle snow plow truck. When the truck operator pulls a lever, the tow plow moves to the side of the truck. It has the capability to clear a path in excess of 24 feet wide. MnDOT bought and deployed two more tow plows in 2017, thus growing the efficiency by \$100,000. Including all associated costs to implement, MnDOT is saving an estimated \$780,000 a year by using tow plows.

## Printing Business Practices

Printing materials and documents represent a large cost category within administrative areas of the organization. In 2015, central office printers were defaulted to duplex printing. In 2017 MnDOT realized nearly a 2.5 million sheet reduction. A majority of the sheet reduction can be attributed to the switch to automatic duplexing. Additional strategies such as signing and processing administrative documents electronically and transferring documents electronically are also being pursued. Implementation costs for the switch to duplex printing were negligible. MnDOT is saving an estimated \$20,000 annually by switching to duplex printing. Calculation based on currently available data for a portion of MnDOT offices.

## Georilla

Georilla is a web mapping interface MnDOT's Metro District began using in 2010. Since its inception, it has gained wide acceptance and is a department-wide resource. Currently, Georilla has over 600 users and gets 200 users daily. Georilla brings disparate data and tools together in one interface, allowing managers and employees to access the vast amounts of data across the agency. Georilla provides a map, but also allows employees to drill down into the depths of the data to find greater detail. The financial benefits of Georilla from 2016 forward were evaluated through an agency-wide survey conducted in July 2016 in which 57 employees reported a total of 5,416 hours in annual time savings from Georilla-enabled efficiencies. Compensation was determined by grouping staff, which were generally in either technical or engineering positions, in proportion to hour-weighted reported savings. In 2017 there were over 55,000 site visits to Georilla. Benefits from 2010-2015 were then prorated based on site visits for each year. Using this approach and including all associated costs to implement, MnDOT is saving an estimated \$210,000 annually by using Georilla.

## Blowing Snow Control Using Benefit Cost Analysis

MnDOT uses an array of blowing snow control measures such as living snow fences, structural snow fences, standing corn rows, strategically placed bales, native tall grass plantings and road design elements. All are intended to either increase snow storage in the road ditch or to prevent snow from blowing from the field onto the roadway. MnDOT now uses a web-based tool developed in 2013 in conjunction with the University of Minnesota Center for Transportation Studies to determine the benefit cost ratio of individual sites, selection

factors include land use, winter climate data and traffic volumes. Over 3,700 blowing and drifting snow problem sites covering approximately 1,200 miles of state highways are identified as potential sites. In 2016 the benefits and costs were determined at seven sites where standing corn rows or bales were used. The median benefit cost ratio of the selected sites was 5 to 1 and this ratio was applied to the statewide program extent of 27 miles, up from 16 miles in 2016. MnDOT paid farmers or landowners an average \$5,376.55 per mile for standing corn rows/bales. Farmers are asked to leave five to six rows of standing corn approximately 200 feet from the centerline of the road. By 2026, the program is expected to grow to 50 miles of living snow fence. By applying the 5 to 1 benefit cost ratio to payments made and assuming an expanding program, the department expects to save approximately \$760,000 annually over the next ten years.

## **Snow and Ice Control (Slurry Tanks)**

Slurry Tanks are molded tanks saddle-mounted on the outside snowplow dump box. Each tank holds 400 gallons of liquid that is comprised of 70 percent granular salt and 30 percent salt brine solution. Saturating the salt before it is applied to the roadway reduces blow off and scatter and results in fewer snow plow runs to achieve bare pavement. Saturated salt also melts snow and ice more quickly. The financial benefits in this analysis result from reduced salt use. During the 2016-17 season, 23 trucks in the western portion of MnDOT District 6, near Owatonna, were using slurry tanks, this total is up from 19 used during the 2015-2016 season. Including all associated costs to implement, use of those 23 slurry tanks are saving the department an estimated \$55,000 annually.

## **Connecting MnDOT Facilities by Fiber Optic Network**

Connecting MnDOT facilities through a wide area network using the Regional Transportation Management Center fiber optic system provides significant cost savings, greater flexibility and more redundancy than historical connections. Capitalizing on the established fiber network also allows for enhanced capabilities like VOIP and facility monitoring. Starting in 2009, MnDOT began connecting its metro area facilities through its own fiber optic network, eliminating the need to pay monthly fees to service providers. Fees ranged from \$4,000 per month for a large facility such as the Central Office, to \$200 per month for a typical truck station. To date, MnDOT has connected 19 facilities. Including all associated costs to implement, connecting Metro area facilities via MnDOT-owned fiber optic network is saving the department an estimated \$240,000 annually.

## **Conversion of Fiber Optic Communication Standard (SONET to IP)**

The electronics communications industry continues to develop new products that combine lower cost with greater capabilities. These new products enabled MnDOT's Regional Transportation Management Center to change the fiber optic communications system backbone from the SONET industry standard to an IP based communication system. Both standards have an approximate lifespan of 10 years. However, the cost of a typical IP switch is \$5,500 compared to \$35,000 for a SONET switch. By applying the reduced switch cost to the RTMC's 60 switches, and including all associated costs to implement, MnDOT is saving an estimated \$180,000 annually.

## **Sign Placement Tool (Importing Sign Data using MicroStation)**

The Sign Placement Tool was developed in MnDOT's Metro District after completing an accurate Geographic Information System sign inventory. The GIS based inventory was essential for furthering asset management within the organization. Development of the SPT then created efficiencies when generating maps, layouts and other resources for work orders and construction plans. The tool is initiated within MicroStation by entering the specific project roadway and associated reference points. The SPT and designer basically create an in-place signing plan at their desk with limited time in the field. This process is not only more efficient than the previous field logging technique but it's also safer and eliminates the need for "boots on the ground" field time. Each year, Metro District staff complete and average of seven sign replacement projects. Prior to development of the tool, each project

required three weeks of field work for one staff person. By using the tool, staff time is reduced to one week of combined field and MicroStation time. Including all associated costs to implement, MnDOT is saving an estimated \$20,000 a year using the Sign Placement Tool.

## **Agricultural Tractor Rental Program**

Modeled after a South Dakota program, district fleet staff implemented an agricultural tractor rental program in 2009. Working with manufacturers and implement dealers, MnDOT negotiates reduced rental rates for tractors used primarily for mowing roadsides. In turn, manufacturers and dealers get the benefit of having their product showcased to thousands of drivers and potential customers daily. Tractors are rented for up to 250 hours then returned to dealers where they are then sold, with a full warranty, at reduced prices. In 2017 MnDOT rented a total of 97 tractors using this program and realized savings of approximately \$450,000.

## **Wood Post Cold Storage Buildings**

Historically, chemicals used to treat wood foundation posts for buildings have had a tendency to leech contaminants into the soil. Being cognizant of this fact, MnDOT moved to constructing steel post buildings for cold storage purposes. Recent industry advances in wood treatments that reduce soil contamination, have enabled MnDOT, in conjunction with the Office of Environmental Stewardship and the Department of Labor and Industry to use wood posts to construct cold storage facilities. These wood post buildings are generally less expensive to construct. In 2017 MnDOT let one building, to be constructed in 2018 using advanced wood post technology. Estimated costs for constructing a similar building using steel post construction would have additional construction costs of approximately \$50,000.

## **Additional Efficiency Activity**

Throughout the department, MnDOT is pursuing other efficiencies. Many are smaller efforts like a minor change to snow plow blades that an operator determines will save time or perform better. Others are larger efforts that are not yet mature, such as using drones or robots for remote inspection of bridges or culverts. As these efforts mature or their deployment grows they will be considered for inclusion in future efficiencies reports.

# Appendix A: Products and Services Summary List and Descriptions

## 2017 Products and Services Framework

Table 25: Products and Services Framework

Program	
Budget Activity	Product and Service
<b>Multimodal Systems</b>	
Aeronautics	Airports Aviation Safety Operations and Regulation
Freight	Commercial Truck and Bus Safety Freight Rail Improvements Freight System Planning Port Improvements Rail Crossing Safety
Passenger Rail	Intercity Passenger Rail Improvement
Transit	Bicycle and Pedestrian Planning and Grants Light and Commuter Rail Transit Planning and Grants
<b>State Roads</b>	
Trunk Highway Program Planning and Delivery	Develop Highway Improvement Projects Highway Construction Management Oversight Plan Highway System Research and Development
Trunk Highway State Road Construction	Other Trunk Highway System Improvements Trunk Highway System Expansion Trunk Highway System Preservation
Trunk Highway Debt Service	Trunk Highway Debt Service
Trunk Highway Operations and Maintenance	Bridges and Structures Inspection and Maintenance Roadside and Auxiliary Infrastructure Snow and Ice System Roadway Structures Maintenance Traffic Devices Operation and Maintenance
Statewide Radio Communications	Radio Towers and Communications
<b>Local Roads</b>	
County State Aid Roads	County State Aid Highway
Municipal State Aid Roads	Municipal State Aid Highway

Note: External Partner Support can be used by any office and any budget activity.

## Products and Services Descriptions

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### Aeronautics

**Airports:** Funding and administering airport grants, assisting local units of government and installing and operating navigational aids.

**Aviation Safety Operations and Regulation:** Protecting aviation users, promoting aeronautics safety and developing aviation policies and regulations in Minnesota.

### Freight

**Commercial Truck and Bus Safety:** Issuing appropriate registrations, certificates and permits; conducting audits, reviews and safety inspections; and providing information, education and technical assistance related to commercial motor carriers.

**Freight Rail Improvements:** Funding provided to regional railroad authorities, railroads and shippers to improve rail facilities through the Minnesota Rail Service Improvement program. This includes developing related agreements and administering related grants and loans from other funding sources.

**Freight System Planning:** Developing plans and information to support an integrated system of freight transportation in Minnesota, including statewide plans related to freight, rail and ports and waterways.

**Port Improvements:** Funding provided to public port authorities through the Port Development Assistance Program. This includes developing related agreements and administering related grants and loans.

**Rail Crossing Safety:** Identifying and developing safety improvements at railroad grade crossings; coordinating rail crossing safety and rail regulatory activities and monitoring functions of railroad track and structures.

### Passenger Rail

**Intercity Passenger Rail Improvement:** Activities and grants related to high speed and intercity rail. Includes system planning; project scoping; environmental documents; public hearings; preliminary engineering; final design; rolling stock procurement; acquisitions (including right of way); construction; field inspections; negotiating with the railroads; developing financial, project management and operating plans; value engineering; entering into cost sharing agreements with other public and private entities; carrying out the provisions of the High Speed Rail Compact on behalf of the state; and other technical activities.

## Transit

**Light and Commuter Rail:** All work and grants related to light rail transit, including planning, project scoping, environmental documents, public hearings, preliminary engineering, value engineering, final design, acquisitions (including right of way), construction, field inspection and other technical activities.

**Bicycle and Pedestrian Planning and Grants:** Developing and implementing the Statewide Bicycle System Plan, Pedestrian System Plan, State Bikeway Route development, State Bicycle Map, bicycle and pedestrian design guidance and program administration. Administering Safe Routes to School grant programs and managing the ABC Ramps.

**Transit Planning and Grants:** Developing and implementing the Greater Minnesota Transit Investment Plan and other planning activities. This includes programming and administering grants funded by the Federal Transit Administration and state appropriations.

## Trunk Highway Program Planning & Delivery

**Highway Construction Management Oversight:** Managing or monitoring the overall progress of a state highway project through completion of construction and final project documentation. Includes early project coordination to address project specific or procurement method requirements and constraints. Work primarily includes field inspections, oversight, quality management, testing, project scheduling and monitoring for compliance with the schedule and specifications. Work also involves managing and advising appropriate implementation of State Road Construction and federal funding allocations including fiscal management, financial tracking and regulatory conformity.

**Develop Highway Improvement Projects:** Managing or monitoring the overall progress of a state highway project from project initiation through completion of the project delivery package for procurement and letting. This includes ongoing project coordination as needed to address project specifics and procurement method requirements and constraints; activity coordination to ensure delivery of projects using appropriate scheduling and monitoring tools to ensure efficient delivery on time and within budget; managing and advising appropriate implementation of State Road Construction and federal funding allocations including fiscal management, financial tracking and regulatory conformity. This encompasses all direct and supporting activities necessary for preparing the contract documents and supporting documentation for construction contract procurement and as needed to support the procurement process. The time frame usually begins once a project is identified and ends prior to letting, but can extend into the construction time frame.

**Research and Development:** Administering and monitoring MnDOT's research program. Guiding policy decisions by developing, refining and testing methods for best practices and by using appropriate economic, demographic and labor market analysis. Providing strategic direction and establishing outcomes and performance measures for MnDOT's research program. Fostering the exchange of technical information and providing access to results of external and internal research.

**Plan Highway System:** Managing and integrating current data and best practices for multi-modal policy formation and investment packaging: coordinating transportation system plans and policies with other government entities; preparing updates of the statewide plan; applying long-range statewide transportation policies and performance measures at the district level to guide district transportation project/investment decisions both within the district and in regional and inter-regional corridors, which may cross district lines; using mobility performance targets to monitor corridor performance, identify problem areas, and assess where additional management and/or investments are needed to improve under-performing areas. This includes the technical assistance provided to districts and local partners by MnDOT's Central Office.

## Trunk Highway State Road Construction

**Trunk Highway System Expansion:** Hard construction dollars used for expansion on roads and bridges shoulder to shoulder.

**Other Trunk Highway System Improvements:** Hard construction dollars used for stand-alone projects outside of the highway shoulder, including intelligent transportation systems.

**Trunk Highway System Preservation:** Hard construction dollars used for preservation of roads and bridges shoulder to shoulder.

## Trunk Highway Debt Service

Trunk Highway Debt Service: Repayment of bond debt.

## Trunk Highway Operations and Maintenance

**Bridges and Structures Inspection and Maintenance:** Inspecting, maintaining and operating bridges and structures (bridges, box culverts and overhead sign structures). Conducting bridge inspections, providing inspection training, monitoring and certification; maintaining and repairing bridges; inspecting, maintaining and repairing non-bridge structures such as earth retaining systems (retaining walls), noise walls, tower lighting, roadway lighting and traffic signal systems.

**Roadside and Auxiliary Infrastructure:** Maintaining rest areas, fixed scale sites, roadside erosion, vegetation, mowing, and regulatory functions such as land management permits, encroachments, noxious weed control, MS4, etc.

**Snow and Ice:** All work related to keeping the roads clear of snow and ice. Major activities include winter stockpiling, setup and transfer of de-icing materials, plowing and sanding, preparing, inspecting and cleaning equipment, installing snow fences and post storm cleanup.

**Traffic Devices Operation and Maintenance:** Inspecting, maintaining, operating and managing the highway traffic safety system through signal timing, freeway management/operations, speed zoning, signals, signing, lighting, guardrail, cable median barrier, crash attenuators, pavement markings, traffic management systems (i.e. ramp meters, cameras) and other activities and devices.

**System Roadway Structures Maintenance:** Inspecting, maintaining and operating the state highway system roadway structures, including pavement, shoulders and drainage.

## Statewide Radio Communications

**Radio Towers and Communications:** Making major wireless or electronic systems upgrades or improvements; providing a shared public safety radio system among state agencies; deploying electronic and wireless communications systems at regional Transportation Operations Communications Centers, maintaining wireless two-way radio communications systems, towers and electronic equipment.

## County State Aid Roads

**County State Aid Highway:** Distributing and administering construction and maintenance funds to counties for eligible roads and bridges.

## Municipal State Aid Roads

**Municipal State Aid Highway:** Distributing and administering construction and maintenance funds to cities with a population greater than 5,000 for eligible roads and bridges.

## External Partner Support

**External Partner Support (can occur in any of the products and services):** Used for dedicated appropriations, including agreements and partnerships. These services are for outside partners, such as cities, counties, other agencies, states, countries or other governmental entities. This can be used by any program or budget activity.

## Appendix B: Glossary of Terms

The glossary of terms provides definitions of specific terms used in this report.

**Area Transportation Partnership:** An ATP is a group of traditional and non-traditional transportation partners including representatives from MnDOT, Metropolitan Planning Organizations, Regional Development Commissions, counties, cities, tribal governments, special interests and the public that have the responsibility of developing a regional transportation improvement program for their area of the state.

The ATP process was introduced in the early 1990s to ensure stakeholder participation in the investment of federal transportation funding. The ATP process provides for early and continuous involvement in the development of the State Transportation Improvement Plan a four-year list of projects that are expected to be done within that time frame.

**Change Order:** see supplemental agreement

**Construction cost index:** The Minnesota construction cost index is an indicator of price trends for highway construction. It is composed of six indicator items: roadway excavation, to indicate the price trends for all roadway excavation; concrete pavement and plant-mixed bituminous, to indicate the price trend for all surfacing types; and reinforcing steel, structural steel, and structural concrete, to indicate the price trend for structures.

**Cost - Indirect:** Indirect costs are those costs that cannot be directly tied to a specific output, e.g. depreciation, routine building maintenance and other administrative and support costs. Indirect costs are frequently referred to as “the cost to keep the lights on.”

**Cost - Direct:** Direct costs occur when expenditures are tied directly to a project number that can be tracked to a customer deliverable. That is, direct cost dollars buy products and/or services delivered directly to the traveling public.

**District Risk Management Program:** Focuses funding on all non-National Highway System highway needs on all state highways. The majority of the program supports pavement and bridge rehabilitation or replacement projects. The DRMP project selection process is structured to give districts the flexibility to address their greatest regional and local risks. Districts are also able to make additional investments on the NHS system if the proposed project is in response to a high risk issue.

**Effectiveness:** Performance measure focused on achieving the end goal and takes into consideration any variables that may change in the future. Effectiveness encourages innovation as it demands innovation to meet desired goal(s).

**Efficiency:** Efficiency is often confused with effectiveness as the output to input ratio and focuses on getting the maximum output with minimum resources and still meet effectiveness measures. Efficiency focuses on doing things right and demands documentation and repetition. An efficiency is a deliberate decision or business process improvement that provides cost savings without compromising the quality of outcomes to the state of Minnesota.

**Inflation factor:** For unit cost growth across all operations and maintenance activities, MnDOT is using a 3 percent inflation factor based on historical data. It incorporates labor compensation rates and pricing for major commodity materials and services, such as fuel, asphalt, utilities, and salt. A 2 percent inflation factor is used when the bulk of the costs are labor, based on historical MnDOT labor costs.

**Internal Efficiency Savings:** Internal efficiencies are essentially all the ways MnDOT maximizes the use of financial resources, such as deliberate decisions and business processes that allow MnDOT to directly save money, avoid costs or provide a higher quality outcome. Efficiencies that provide cost savings and cost avoidance are pursued as long as they do not compromise the organization's legal requirements or the quality of the final product delivered.

**Metropolitan Planning Organization:** A metropolitan planning organization is a federally mandated and federally funded transportation policy-making organization in the United States that is made up of representatives from local government and governmental transportation authorities.

MPOs, representing local governments and working in coordination with state departments of transportation and major providers of transportation services, have responsibility for the regional transportation planning processes in urbanized areas. A core function of MPOs is to establish and manage a fair and impartial setting for effective transportation decision making in an urbanized area.<sup>6</sup>

**Minnesota GO:** The Minnesota Department of Transportation’s 50-year vision to better align the transportation system with what Minnesotans expect for their quality of life, economy and natural environment. The vision focuses on an understanding that transportation is a means to other ends, not an end in itself. It also recognizes that infrastructure is only one of many elements necessary to achieving a high quality of life, a competitive economy and a healthy environment.

This 50-year vision for transportation requires consistency and collaboration across jurisdictions and sectors. Although MnDOT initiated the effort to develop the vision, this is a vision for all forms of transportation and ownership of the vision is a shared responsibility.

Minnesota’s multimodal transportation system maximizes the health of people, the environment and our economy. The system:

- Connects Minnesota’s primary assets—the people, natural resources and businesses within the state—to each other and to markets and resources outside the state and country
- Provides safe, convenient, efficient and effective movement of people and goods
- Is flexible and nimble enough to adapt to changes in society, technology, the environment and the economy

Quality of Life	Environmental Health	Economic Competitiveness
Recognizes and respects the importance, significance and context of place – not just as destinations, but also where people live, work, learn, play, and access services Is accessible regardless of socio-economic status or individual ability.	Is designed in such a way that it enhances the community around it and is compatible with natural systems. Minimizes resource use and pollution.	Enhances and supports Minnesota’s role in a globally competitive economy and the international significance and connections of Minnesota’s trade centers  Attracts human and financial capital to the state.

<sup>6</sup> {[United States Government Accountability Office \(GAO\) Report-GAO-09-868, entitled, “Metropolitan Planning Organizations: Options Exist to Enhance Transportation Planning Capacity and Federal Oversight”](#), September 2009. Pages 3-4.}

**Minnesota State Highway Investment Plan:** The 20-Year Minnesota State Highway Investment Plan 2014-2033 supports the guiding principles from the Minnesota GO vision and links the policies and strategies laid out in the Statewide Multimodal Transportation Plan to improvements on the state highway system.

**National Highway System:** The National Highway System consists of roadways important to the nation's economy, defense and mobility, and was developed by the Department of Transportation in cooperation with the states, local officials, and metropolitan planning organizations. The NHS includes the following subsystems of roadways (a specific highway route may be on more than one subsystem):

- **Interstate** - The Eisenhower Interstate System of highways retains its separate identity within the NHS.
- **Other Principal Arterials** - These are highways in rural and urban areas that provide access between an arterial and a major port, airport, public transportation facility, or other intermodal transportation facility.
- **Strategic Highway Network** - This is a network of highways that are important to the United States' strategic defense policy and that provide defense access, continuity and emergency capabilities for defense purposes.
- **Major Strategic Highway Network Connectors** - These are highways that provide access between major military installations and highways that are part of the Strategic Highway Network.
- **Intermodal Connectors** - These highways provide access between major intermodal facilities and the other four subsystems making up the National Highway System.

**Performance measures:** Quantifiable indicators used to assess how well, or how effectively, an organization is achieving its desired objectives. Much of the time results are compared against established targets to determine if improvement is needed.

**Productivity:** The measure of production or output per unit, not necessarily measure in monetary terms.

**Project full cost:** Actual transaction amounts plus applied overhead cost rates established by MnDOT based on the previous year's activity.

**Regional Community Improvement Priority:** Regional Community Improvement Priorities are investments that respond to regional concerns and collaboration opportunities, beyond system performance needs, to support economic competitiveness and quality of life in Minnesota. While these investments may improve highway performance, they do not constitute an improvement necessary to meet MnDOT's system-wide performance targets.

**Statewide Multimodal Transportation Plan:** This document is reflective of Minnesotans' voices, as expressed throughout an intensive engagement and review process. The content is strategically organized into chapters that address the most pertinent questions facing Minnesota's transportation system. The result is a transportation policy framework for all Minnesota partners and transportation modes for the next 20 years. The plan will focus on multimodal solutions that ensure a high return-on-investment while considering the context of place and how land use and transportation systems should be better integrated.

**State Transportation Improvement Program:** The State Transportation Improvement Program is Minnesota's four-year transportation improvement program. The STIP identifies the schedule and funding of transportation projects by state fiscal year (July 1 through June 30). It includes all state and local transportation projects with federal highway and/or federal transit funding along with 100 percent state funded transportation projects. Rail, port and aeronautic projects are included for information purposes. The STIP is developed/updated on an annual basis.

**Statewide Performance Program:** The statewide planning process establishes a cooperative, continuous and comprehensive framework for making transportation investment decisions throughout the state. Oversight of the process is a joint responsibility of the Federal Highway Administration and the Federal Transit Administration.

#### Performance-Based Planning

- The statewide planning process will establish and use a performance-based approach to transportation decision-making to support the national goals ([MAP-21 23 USC §150](#); [MAP-21 Fact Sheet on Performance Management, National performance goals](#); and [FAST Act Fact Sheet on Performance Management](#)).
- Each state will establish performance targets that address the performance measures, where applicable, to use in tracking progress toward attainment of critical outcomes for the state.
- The state will select performance targets in coordination with the relevant Metropolitan Planning Organizations to ensure consistency, to the maximum extent practicable.
- In urbanized areas not represented by a MPO, the state will select performance targets in coordination with the providers of public transportation, to the maximum extent practicable, to ensure consistency with sections 5326(c) and 5329(d) of title 49.
- States will integrate into the statewide transportation planning process other performance-based plans and processes

**Supplemental Agreement (Change Order):** According to the Minnesota Department of Transportation, *Standard Specifications for Construction, 2018 Edition*, a change order (synonymous with supplemental agreement) is a written agreement between the Department and the Contractor, executed on the prescribed form and approved as required by law, covering the performance of extra work or other alterations or adjustments to the Contract.<sup>7</sup>

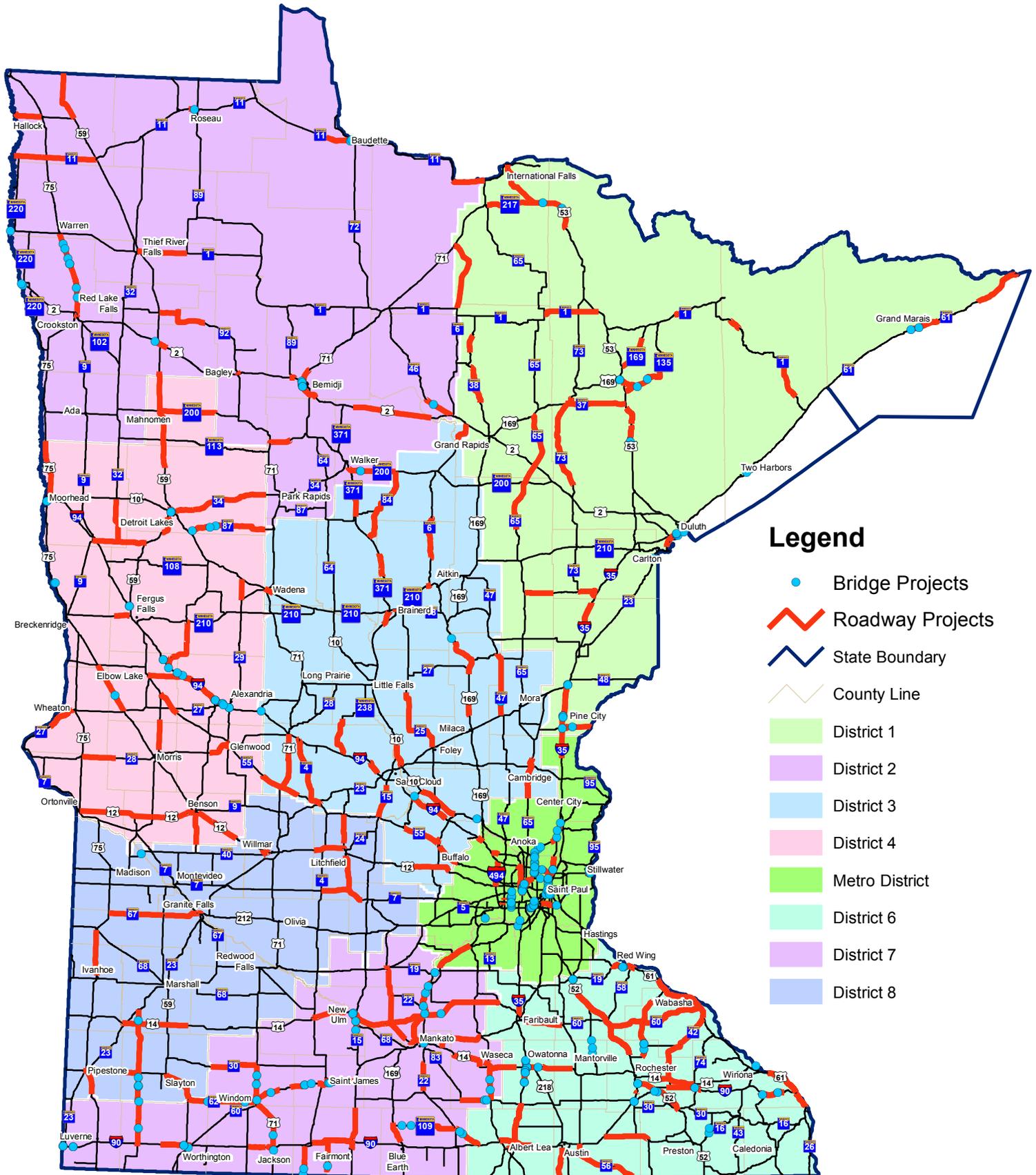
**Trend analysis:** The practice of collecting information and developing a pattern or trend in the information. In project management, trend analysis technique uses historical results to predict future outcome.

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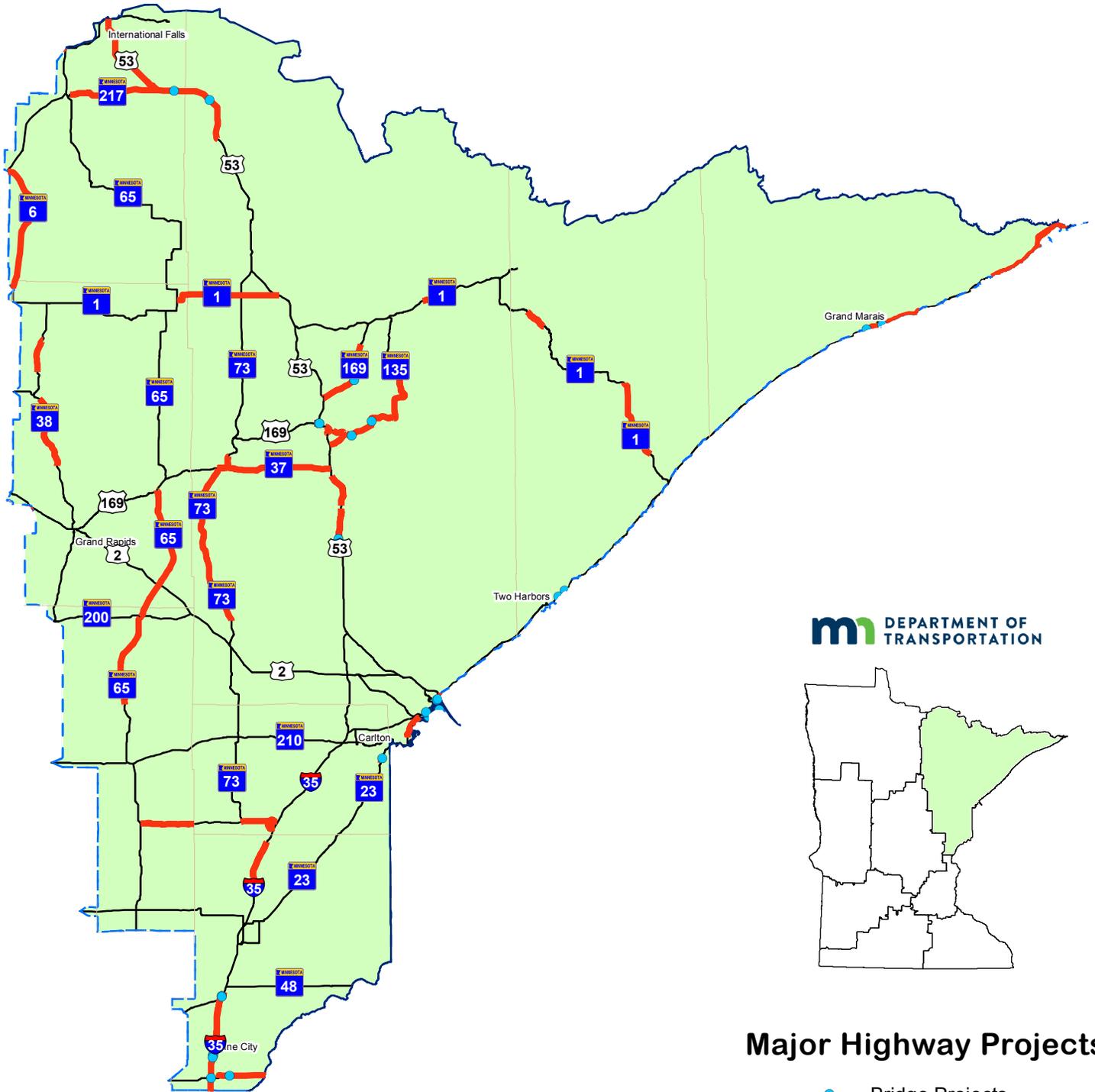
<sup>7</sup> [Minnesota Department of Transportation Standard Specifications for Construction, 2018 Edition](#); p. 6, 12.

# Appendix C: Major Highway Project Summary Pages

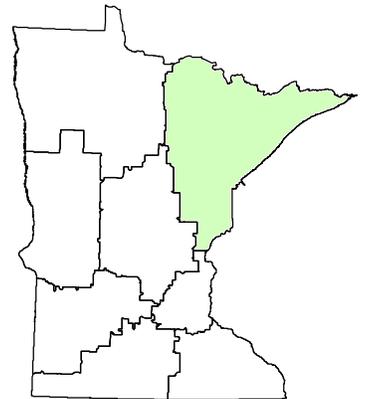
# Major Highway Projects 2017



# Major Highway Projects 2017 D1-DULUTH



**mn** DEPARTMENT OF  
TRANSPORTATION



## Major Highway Projects

-  Bridge Projects
-  Roadway Projects
-  State Boundary
-  County Line
-  Construction District

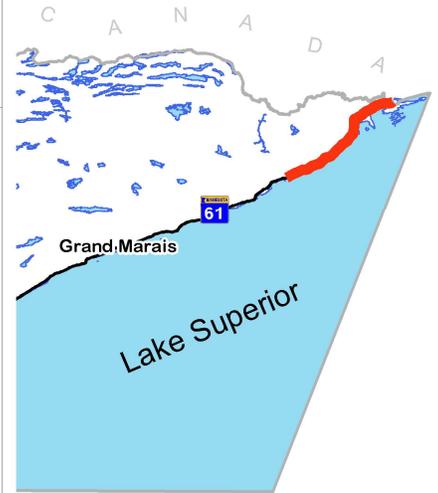
## District Project Summary

### District 1

Route	State Project #	Project Location	Page
MN 61	1604-45	Reservation Bay Rd to US/Canadian Border	A 2
MN 37	6914-19	US 53 to MN 135	A 3
Hwy 1	3801-92	Hwy 1, N of the Kawishiwi River and Hwy 1 S of CR 2 to Isabella	A 4
Hwy 1	6904-46	Six Mile Lake Road to Bradach Road in St. Louis County	A 5
Hwy 1	3803-34	From Isabella to Salverson Rd.	A 6
Hwy 1	3101-37	Hwy 65 to Hwy 53	A 7
Hwy 2	6937-102	In Duluth	A 8
Hwy 6	3603-14	On Hwy 6 from just north of Hwy 1 to Big Falls	A 9
Hwy 23	6910-96	Hwy 23 In Duluth From Becks Road to 84th Avenue West	A 10
Hwy 23	0901-67	Hwy 23 near intersection with County Road 18	A 11
Hwy 23	6910-89	I-35 to Becks Road	A 12
Hwy 27, 73 & 289	8821-200	Moose Lake Area	A 13
Hwy 37	6947-50	From Highway 169 in Hibbing to Highway 53	A 14
Hwy 38	3108-70	County Road 19 to the City of Marcell	A 15
Hwy 38 & Hwy 286	3108-76	On Hwy 38 from Horseshoe Lake Rd to Bigfork and on Hwy 286 from Hwy 6 to Marcell	A 16
Hwy 53	6918-86	Between Eveleth and Virginia, relocate Hwy 53 away from United Taconite Operations	A 17
Hwy 53	6917-142	On Hwy 53 from Central Lakes Road to the interchange with Hwy 37	A 18
Hwy 53	6917-141	Southbound from the Paleface River to Augusta Lake Rd	A 19
Hwy 53	3608-49	From Keyes Rd to Crescent Dr in International Falls	A 20
Hwy 53	3608-48	In the city of International Falls	A 21
Hwy 61	1602-50	Around Grand Marais	A 22
Hwy 61	3805-79	Hwy 61 Silver Creek Crossing	A 23
Hwy 61	3805-99	Hwy 61 at Stewart River	A 24
Hwy 65	0112-52	South Sandy River to Hwy 200	A 25
Hwy 65	3111-30	Hwy 200 to Hwy 169	A 26
Hwy 70	5811-12	Hwy 70 East of Hwy 361 to the Minnesota/Wisconsin state line	A 27
Hwy 73	6928-28	Various locations on Highway 73 and Highway 2 that include the City of Cromwell and the City of Floodwood	A 28
Hwy 135	6912-77	From Hwy 53 to just south of County Road 558	A 29
Hwy 169	3116-142	County Road 15 to County Road 7	A 30
Hwy 169	6934-116	In Hibbing, from the intersection of Hwy 73 to east of County Road 5.	A 31
Hwy 169	6935-89	Hwy 169 In Virginia from County Road 109 to Hoover Rd	A 32
Hwy 169	6936-19	Hwy 53 to County Hwy 26	A 33
Hwy 217	3614-20	Little Fork to Hwy 53	A 34
I-35	5880-180	North of Pine County Rd 33 to south of the Carlton County line	A 35
I-35	5880-186	Replace two bridges on I-35 over the BNSF railroad south of Hwy 48	A 36
I-35	5880-191	South of County Road 11 to 1 mile south of Hinckley	A 37
I-535	6981-9030L	On the I-535 Blatnik Bridge over the St. Louis River between Duluth, MN and Superior, WI.	A 38
Hwy 2	6937-69100D	Bong Bridge over Saint Louis River	A 39

# PROJECT SUMMARY

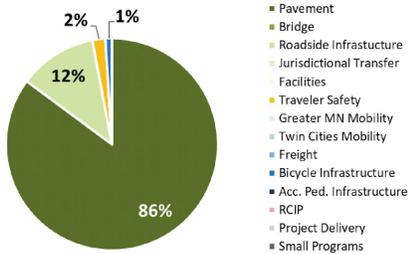
MN 61  
 Reservation Bay Rd to US/Canadian Border  
 Bridge NA  
 State Project No. 1604-45  
 NA



## Primary Purpose

Performance-based need: pavement condition.

## Investment Category



## Project Description

Pavement resurfacing, culvert replacement/repairs, guardrail replacement and turn lane construction on Hwy. 61 between Reservation Bay Road and the US/Canada border. Other miscellaneous work will include resurfacing of overlook parking areas and ADA upgrades in the Grand Portage Visitor Center. Project will require coordination with the Grand Portage Band and GSA/US Customs.

## Recent Changes and Updates

This is a new project.

## Project History

The project is being scheduled as a fiscal year 2021 "ELLA" (early let, late award) so that construction work can begin in July 2020.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2017

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 12.8	\$ 12.8
Other Construction Elements:	\$ 1.1	\$ 1.1
Engineering:	\$ 2.2	\$ 2.2
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 16.1</b>	<b>\$ 16.1</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

The Baseline and current estimates were completed in March 2017. The estimates include bituminous resurfacing, hydraulics, roadside safety features, and other road improvements.

## Project Risks

Ongoing project coordination with the Grand Portage Band results in unanticipated work being requested that impacts cost and schedule. The GSA/US Customs results in unanticipated work as well. DNR or Grand Portage Band require more significant drainage structures at waterway crossings than what was scoped. Simple box culverts are not acceptable.

Wetland permits encounter unanticipated USACE problems/delays. Additional R/W or easements are needed to construct bypasses so that deep culverts can be replaced or repaired while maintaining traffic on the highway.

Northern long eared bats, a threatened and endangered species, impact the schedule for tree clearing.

## Schedule

Environmental Approval Date: Pending Approval  
 Municipal Consent Approval Date: Not Needed  
 Geometric Layout Approval Date: Not Needed  
 Construction Limits Established Date: Pending approval  
 Original Letting Date: 3/27/2020  
 Current Letting Date: 4/24/2020  
 Construction Season: 2020 and 2021  
 Estimated Substantial Completion: Fall 2021



Minnesota Department of Transportation  
 District 1  
 1123 Mesaba Ave  
 (218) 725-2700  
 District Engineer: Duane Hill  
 Project Manager: Brian Larson  
 Revised Date: 12/15/2017

## PROJECT SUMMARY

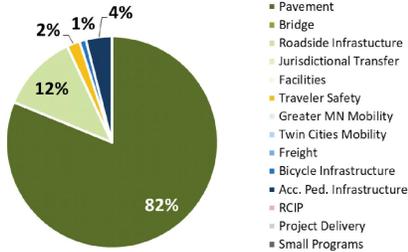
MN 37  
 US 53 to MN 135  
 Bridge NA  
 State Project No. 6914-19  
 NA



### Primary Purpose

Performance-based need: Pavement Condition

### Investment Category



### Project Description

The project is 3.7 miles long, and extends from Highway 53 to Highway 135. Project Improvements include: pavement resurfacing, drainage system improvements, curb ramp construction and sidewalk improvements in the City of Gilbert.

### Recent Changes and Updates

This is a new project.

### Project History

This is a new project.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2017

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 5.4	\$ 5.4
Other Construction Elements:	\$ 0.4	\$ 0.4
Engineering:	\$ 1.0	\$ 1.0
Right of Way:	\$ 0.1	\$ 0.1
<b>Total:</b>	<b>\$ 6.9</b>	<b>\$ 6.9</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

The Baseline and current estimates were completed in April 2017. The estimates include bituminous resurfacing and other road improvements. Also included in the estimates are pedestrian improvements within the city of Gilbert.

### Project Risks

This is a new project.

### Schedule

Environmental Approval Date: Pending approval  
 Municipal Consent Approval Date: Need Unknown  
 Geometric Layout Approval Date: Not Needed  
 Construction Limits Established Date: Need Unknown  
 Original Letting Date: 1/1/19  
 Current Letting Date: 11/22/2019  
 Construction Season: Spring 2020  
 Estimated Substantial Completion: Fall 2020



Minnesota Department of Transportation  
 District 1  
 1123 Mesaba Ave  
 (218) 725-2700

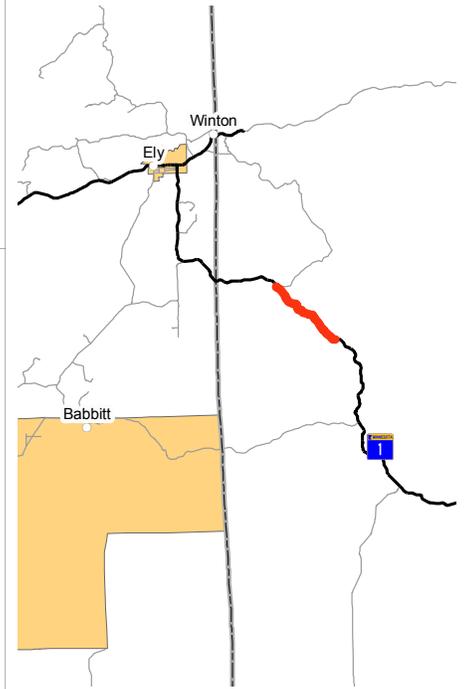
District Engineer: Duane Hill  
 Project Manager: Michael Kalnbach

Revised Date: 12/15/2017

# PROJECT SUMMARY

## Hwy 1

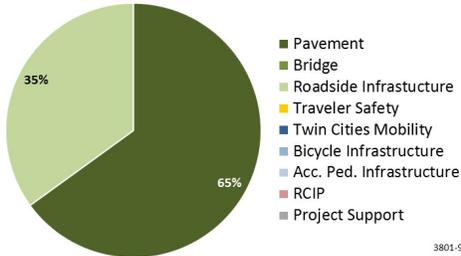
Hwy 1, N of the Kawishiwi River and Hwy 1 S of CR 2 to Isabella  
 Bridge NA  
 State Project No. 3801-92  
<http://www.dot.state.mn.us/d1/projects/hwy1isabella/index.html>



### Primary Purpose

Performance-based Need: Pavement condition

### Investment Category



### Project Description

The northerly project segment is 5 miles long and located south of the Kawishiwi River. The southerly project segment is 14 miles long and located between Lake County Road 2 and Isabella. The work for both projects includes bituminous resurfacing, drainage improvements and the removal of rock outcroppings in some areas.

In general, a 75' right of way or easement width will be acquired on each side of the highway centerline.

### Recent Changes and Updates

R/W acquisition was not able to be completed for the 02/24/17 letting date. Letting date was changed to 04/28/17 so that PIF could be developed. The change in letting date did not impact when construction work could begin. Project was programmed as a FY 2018 ELLA. Work could not begin until after July 1, 2017. This resulted in a construction start date of July 10, 2017 being scheduled and construction work extending into the 2018 season. Construction work began on August 21, 2017 due to delay in obtaining a Permit to Construct from the MnDNR.

### Project History

Programmed for construction in 2017. A large portion of the project is located in the Superior National Forest. MnDOT does not own any highway right of way; so, easements will need to be obtained from the Superior National Forest and permanent right of way from a number of private land owners. The majority of the project area was last resurfaced in 2000. The 2015 pavement condition rating indicates the Ride Quality Index is poor resulting in a rough ride, high maintenance costs, and reduced load carrying capacity.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2012

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 6.6	\$ 4.7
Other Construction Elements:	\$ 0.4	\$ 0.5
Engineering:	\$ 1.4	\$ 1.0
Right of Way:	\$ 0.0	\$ 0.2
<b>Total:</b>	<b>\$ 8.4</b>	<b>\$ 6.4</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

This Project was let in April 2017. The current estimate is based on the bid amount. It includes the cost for pavement resurfacing and drainage improvements. The cost has been reduced as project scoping has progressed, which showed the need for fewer drainage improvements.

### Project Risks

A substantial amount of culvert replacement work is required. There may be challenges in obtaining highway easements from the Superior National Forest due to federal environmental/NEPA processes. There is a low potential for sulfides to exist in the rock outcroppings. If encountered, it could require avoidance or mitigation due to acid drainage runoff.

### Schedule

Environmental Approval Date: 10/6/16  
 Municipal Consent Approval Date: Not Needed  
 Geometric Layout Approval Date: Not Needed  
 Construction Limits Established Date: Not Needed  
 Original Letting Date: 02/27/2012  
 Current Letting Date: 04/28/2017  
 Construction Season: Fall 2017-Fall 2018  
 Estimated Substantial Completion: September 2018



Minnesota Department of Transportation  
 District 1  
 1123 Mesaba Ave  
 (218) 725-2700  
**District Engineer:** Duane Hill  
**Project Manager:** Brian Larson  
**Revised Date:** 12/15/2016

# PROJECT SUMMARY

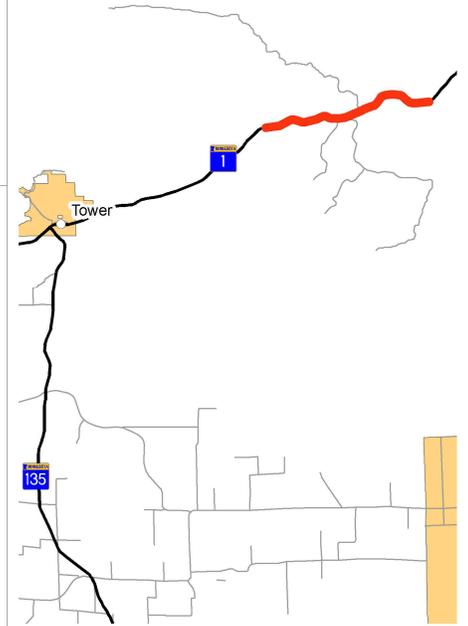
Hwy 1

Six Mile Lake Road to Bradach Road in St. Louis County

Bridge NA

State Project No. 6904-46

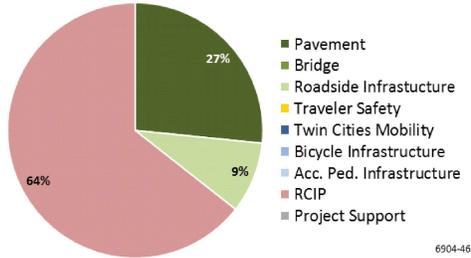
<http://www.dot.state.mn.us/d1/projects/Hwy169eagles>



## Primary Purpose

Regional & community improvement priority

## Investment Category



6904-46

## Project Description

Reconstruction of Six Mile Lake Road to Bradach Road in the Eagles Nest Lake Area.

## Recent Changes and Updates

The project letting was held in November 2016 and the bid prices were considerably lower than the engineers estimate. The Engineers Estimate was \$22.7 million and the low bidder was \$16.4 million. MnDOT received the wetland permit from the Corp of Engineers before project award. The low bidder, Hoffman Construction, started construction in January 2017 performing tree clearing within the corridor. Since that time, the contractor proceeded with all associated contract work and is on schedule for Final Completion July 20, 2018.

## Project History

The rock drilling program was completed in the fall 2015. The lab test results were used to develop a rock mitigation plan in August 2016 for the roadway construction plan. This plan identified a number of additional construction items to be added to this project with sulfide concerns in excavation of on-site materials. The additional construction items are now added and are reflected in the updated construction cost estimate. The project letting was moved to November 2016 with an anticipated construction start date of January 2017.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2007

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 10.5	\$ 16.4
Other Construction Elements:	\$ 0.5	\$ 1.2
Engineering:	\$ 2.2	\$ 5.0
Right of Way:	\$ 1.2	\$ 0.6
<b>Total:</b>	<b>\$ 14.4</b>	<b>\$ 23.2</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

The baseline estimate was based on the premise that equal amounts of money would be spent in two priority areas-the Eagles Nest Lake Area and the Thirteen Hills Area. The project was let in November 2016. The current estimate is based on the actual bid amount, and includes costs for reconstruction of six miles of road. The current estimate also include cost for rock mitigation.

## Project Risks

There are project risks related to schedule and overall project costs. The overall project is on schedule but could be impacted by early winter weather or late spring conditions. The project quantities are on target but we are only about 50% complete (based on value) at this time.

## Schedule

Environmental Approval Date: 11/3/2015  
 Municipal Consent Approval Date: Not Needed  
 Geometric Layout Approval Date: 1/4/2016  
 Construction Limits Established Date: 06/1/2015  
 Original Letting Date: 12/17/2010  
 Current Letting Date: 11/18/2016  
 Construction Season: Spring 2017 - Summer 2018  
 Estimated Substantial Completion: Summer 2018



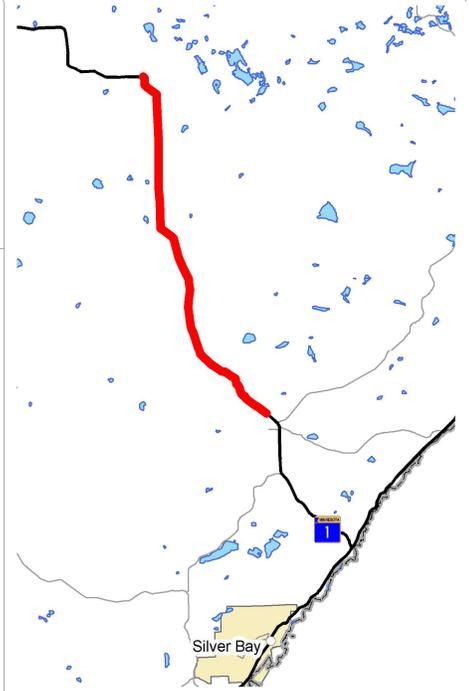
Minnesota Department of Transportation  
 District 1  
 1123 Mesaba Ave  
 (218) 725-2700

District Engineer: Duane Hill  
 Project Manager: Michael Kalnbach

Revised Date: 12/15/2016

## PROJECT SUMMARY

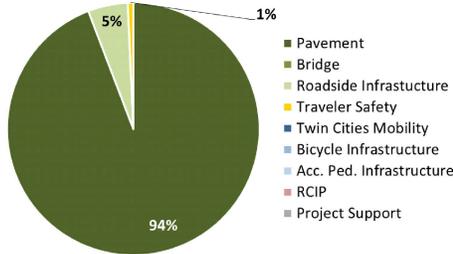
Hwy 1  
From Isabella to Salverson Rd.  
Bridge NA  
State Project No. 3803-34  
NA



### Primary Purpose

Performance-based Need: Pavement Condition

### Investment Category



### Project Description

On Hwy 1 from Isabella to Salverson Road, for a total of 15.2 miles. The project will include resurfacing, frost heave correction and minor drainage repair.

### Recent Changes and Updates

A new pavement design recommendation was issued in March 2017 changing the proposed fix to a mill and overlay.

### Project History

This project will recondition and resurface the existing highway to improve the ride and extend the useful life of the highway.

The letting date was changed to meet balanced letting requirements. A project scoping report was completed in August 2015. A new pavement design recommendation was issued in August 2016, which changed the proposed fix for the project from a mill and overlay to a cold in-place recycle with a chip seal.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2015

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 4.9	\$ 2.6
Other Construction Elements:	\$ 0.3	\$ 0.3
Engineering:	\$ 0.9	\$ 0.6
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 6.1</b>	<b>\$ 3.5</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

The current cost estimate was prepared in July 2017. The estimate includes costs for pavement resurfacing with some short areas of reconstruction. The cost change is based on a reduced need for reconstruction.

### Project Risks

Approval of USACE permit  
Site conditions that differ from the design

### Schedule

Environmental Approval Date: Need Unknown  
Municipal Consent Approval Date: Not Needed  
Geometric Layout Approval Date: Not Needed  
Construction Limits Established Date: Not Needed  
Original Letting Date: 01/01/2019  
Current Letting Date: 9/22/2017  
Construction Season: SPRING 2018 -FALL 2018  
Estimated Substantial Completion: FALL 2018



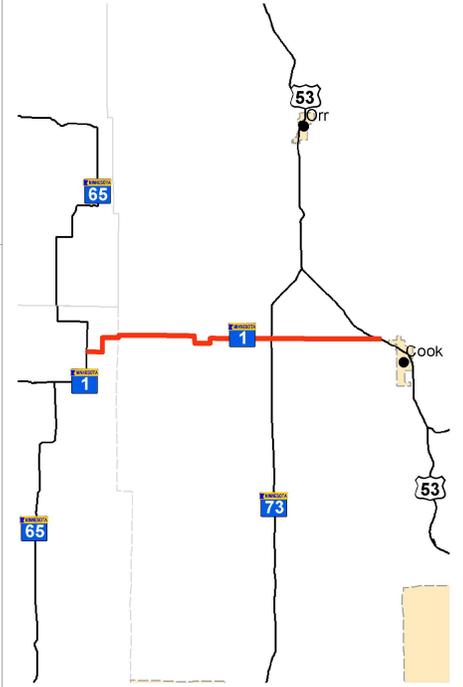
Minnesota Department of Transportation  
District 1  
1123 Mesaba Ave  
(218) 725-2700

District Engineer: Duane Hill  
Project Manager: Randy Costley

Revised Date: 12/15/2016

# PROJECT SUMMARY

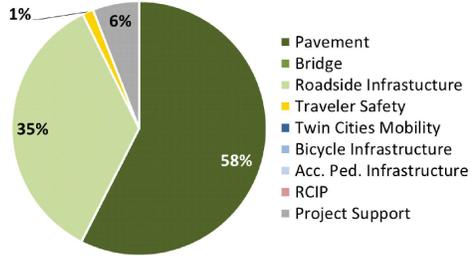
Hwy 1  
 Hwy 65 to Hwy 53  
 Bridge NA  
 State Project No. 3101-37  
 NA



## Primary Purpose

Pavement preservation project.

## Investment Category



## Project Description

The project is 20.7 miles of bituminous pavement resurfacing from the junction with TH 65 to the junction of TH 53. Two sections of TH 1 that go around rock outcroppings will be realigned to improve the highway geometrics. Realignment work will also be completed at the TH53, TH1 intersection to improve geometrics.

## Recent Changes and Updates

The project scope remains unchanged, however, the project discription was updated to include the realignment of the TH 53 and TH 1 intersection.

## Project History

Deteriorating pavement is resulting in rough ride, high maintenance costs, and reduced load carrying capacity for the roadway.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 7/1/2016

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 8.5	\$ 8.0
Other Construction Elements:	\$ 0.9	\$ 0.9
Engineering:	\$ 1.6	\$ 1.6
Right of Way:	\$ 0.8	\$ 0.8
<b>Total:</b>	<b>\$ 11.8</b>	<b>\$ 11.3</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

The baseline estimate was prepared in February 2016. The current estimate was completed in August 2017. Both estimates include costs for bituminous pavement resurfacing. The lower projected cost is due to lower bituminous prices.

## Project Risks

This project may be linked to SP 6931-01 on TH 73 from the junction with TH 1 to the junction of TH 53.

Right of way acquisition is needed on this project, the costs to acquire the right of way may impact the Total Project Cost Estimate in the future.

## Schedule

Environmental Approval Date: pending approval  
 Municipal Consent Approval Date: Not Needed  
 Geometric Layout Approval Date: Not Needed  
 Construction Limits Established Date: Pending Approval  
 Original Letting Date: 2/28/20  
 Current Letting Date: 2/28/2020  
 Construction Season: SPRING 2020-FALL2020  
 Estimated Substantial Completion: FALL 2020



Minnesota Department of Transportation  
 District 1  
 1123 Mesaba Ave  
 (218) 725-2700

District Engineer: Duane Hill  
 Project Manager: Doug Kerfeld

Revised Date: 12/15/2016

## PROJECT SUMMARY

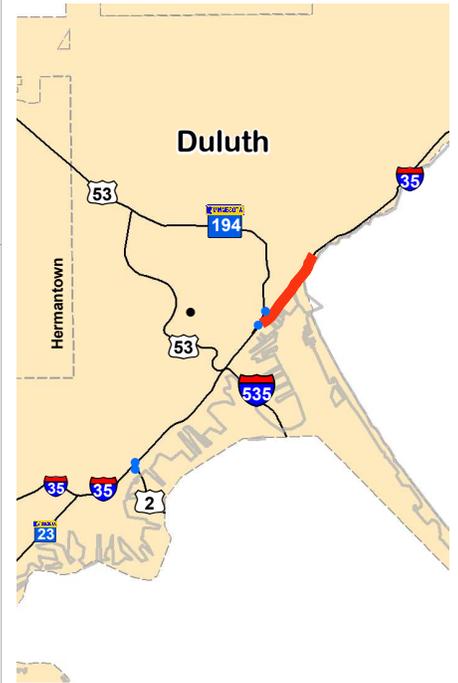
Hwy 2

In Duluth

Bridge 69101,69102,69839

State Project No. 6937-102

<http://www.dot.state.mn.us/d1/projects/hwy194-mesaba-duluth/index.html>



### Primary Purpose

Performance-based need: Bridge Condition for S.P. 6937-102 and 6933-95. Performance-based need: Pavement Condition for S.P. 6933-97.

### Investment Category

\*This project was designed and scoped before the current highway investment plan MnSHIP was developed, which breaks projects into investment categories.

### Project Description

This is an urban project located in Duluth. The project work includes bridge rehabilitation to two bridges (69101 & 69102) on Hwy 2 and two bridge 69839 on Hwy 194/Mesaba Ave. The rehabilitation work involves retrofitting the fracture critical pier caps. Traffic lane configuration changes will be made on Bridge 69839.

It also includes concrete pavement repair, storm sewer repair and ADA accessibility improvements on Hwy. 194/Mesaba Ave. between I-35 and Sixth Ave. East, a distance of 1.4 miles.

### Recent Changes and Updates

This project and Hwy. 194/Mesaba Ave. (S.P. 6933-97) project are now tied together, resulting in a total cost estimate that falls in the Major Projects category.

### Project History

When originally programmed, the bridge rehab work on Hwy. 2 (S.P. 6937-102) and Hwy. 194/Mesaba Ave. (S.P. 6933-95) were tied. In 2016, it was determined that the Hwy. 194/Mesaba Ave. (S.P. 6933-97) pavement repair, ADA improvements and storm sewer repair project be tied to the bridge projects to better coordinate how traffic was handled during construction. Bundling these projects together results in a total cost estimate that falls in the Major Projects category.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 07/01/2015

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 7.8	\$ 7.8
Other Construction Elements:	\$ 0.6	\$ 0.6
Engineering:	\$ 1.7	\$ 1.7
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 10.1</b>	<b>\$ 10.1</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

The base and current cost estimate were prepared in August 2016. The estimates include bridge rehabilitation for S.P. 6937-102. Concrete pavement repair, storm sewer repair and ADA accessibility improvements for S.P. 6933-97.

### Project Risks

Right of Way or Temporary Rights to Construct are needed so the ADA accessibility improvements can be made, which could impact project schedule.

The City of Duluth has a project on Superior St. in 2018-2020 that will require detouring traffic onto Mesaba Ave. The detour will require that Bridge 69840 remain open. Because of this, consideration is being given to deferring some or all of the bridge work associated with this project to construction season 2021.

### Schedule

Environmental Approval Date: Pending approval  
 Municipal Consent Approval Date: Pending Approval  
 Geometric Layout Approval Date: Pending Approval  
 Construction Limits Established Date: 05/24/2016  
 Original Letting Date: 01/01/18  
 Current Letting Date: 02/23/2018  
 Construction Season: Summer 2018  
 Estimated Substantial Completion: Fall 2018



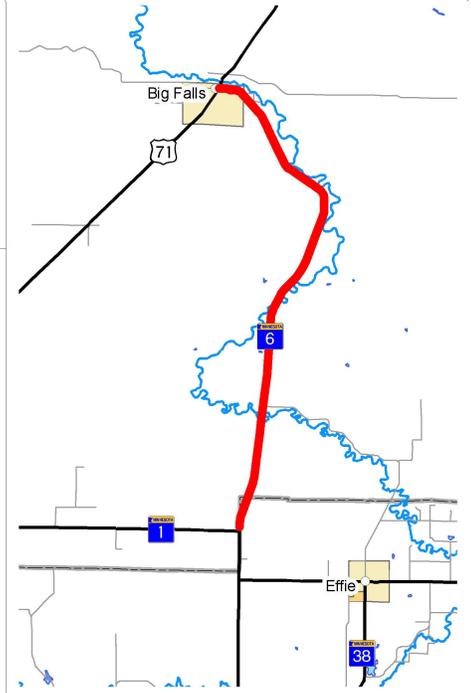
Minnesota Department of Transportation  
 District 1  
 1123 Mesaba Ave  
 (218) 725-2700

**District Engineer:** Duane Hill  
**Project Manager:** Brian Larson

**Revised Date:** 12/15/2016

# PROJECT SUMMARY

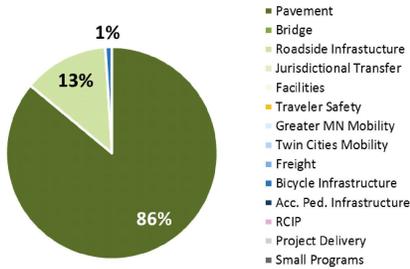
Hwy 6  
 On Hwy 6 from just north of Hwy 1 to Big Falls  
 Bridge NA  
 State Project No. 3603-14  
 NA



## Primary Purpose

Performance-based Need: pavement condition.

## Investment Category



## Project Description

The project is 25 miles long on Hwy 6 between the north junction of Hwy 1 and Hwy 71 in Big Falls. The work includes bituminous pavement resurfacing and drainage improvements. Edge-line rumble strips will also be added to improve safety.

## Recent Changes and Updates

This pavement resurfacing project is programmed for construction in calendar year 2019.

Adding short segments of wider shoulders in select areas for truck pull-offs will be explored.

Letting date changed to 11/16/18 for balanced letting purposes.

## Project History

The need for the project is driven by deteriorating pavement resulting in a rough ride, high maintenance costs and reduced load carrying capacity.

The 2015 pavement condition rating indicates the Ride Quality Index (RQI) is Fair.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2015

	Baseline Est.	Current Est.
Construction Letting:	\$ 7.2	\$ 7.5
Other Construction Elements:	\$ 0.5	\$ 0.7
Engineering:	\$ 1.3	\$ 1.5
Right of Way:	\$ 0.0	\$ 0.1
<b>Total:</b>	<b>\$ 9.0</b>	<b>\$ 9.8</b>

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

## Key Cost Estimate Assumptions

The base cost estimate was prepared in December 2014 before the project was scoped. The estimate includes costs for pavement resurfacing. The current estimate was prepared in August 2017 with a higher contingency providing for the possibility that a thicker pavement surface may be required.

## Project Risks

The extent of the pavement repair has not been fully determined. Truck pull-off areas could result in wetland impacts and require right of way.

Loggers/truckers that use the highway would like to see more substantial work than what is being planned done such as wider shoulders, passing lanes, etc. resulting in possible controversy.

## Schedule

Environmental Approval Date: Pending Approval  
 Municipal Consent Approval Date: Not Needed  
 Geometric Layout Approval Date: Not Needed  
 Construction Limits Established Date: Pending Approval  
 Original Letting Date: 01/01/2019  
 Current Letting Date: 11/16/2018  
 Construction Season: Spring 2019 - Fall 2019  
 Estimated Substantial Completion: Fall of 2019



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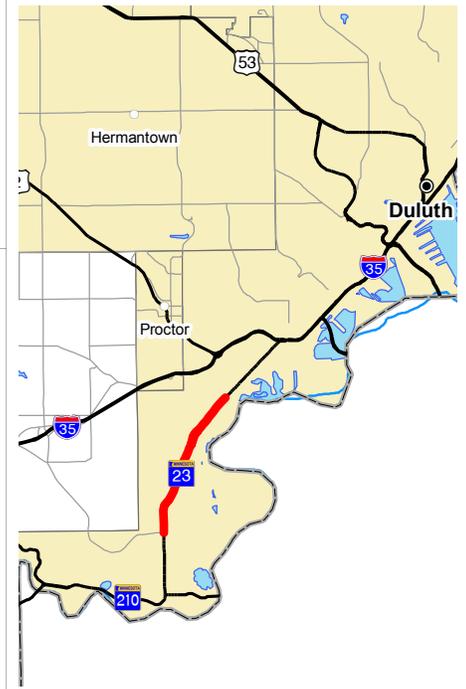
District Engineer: Duane Hill  
 Project Manager: Brian Larson

Revised Date: 12/15/2016

# PROJECT SUMMARY

Hwy 23  
 Hwy 23 In Duluth From Becks Road to 84th Avenue West  
 Bridge 69091  
 State Project No. 6910-96

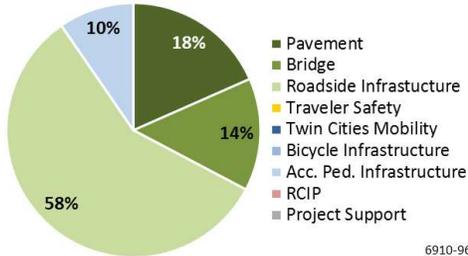
NA  
**Substantially Complete**



## Primary Purpose

Performance-based Need: Pavement, bridge & roadside infrastructure condition

## Investment Category



6910-96

## Project Description

This is an urban/rural project in West Duluth on Hwy 23 from Becks Road to 84th Avenue West. The work includes pavement resurfacing, bridge construction over Knowlton Creek, as well as drainage, safety, and sidewalk improvements.

## Recent Changes and Updates

This project was substantially completed in the Spring of 2017.

## Project History

The letting of this project was delayed to complete design and acquire necessary right of way. The delay to completing construction on SP 6910-89 required a later construction start of this "Phase II" project. This project will take the complete construction season to achieve substantial completion. This project was let in spring 2016 and construction is on-going.

The bridge construction over Knowlton Creek is near completion.

It was determined that the Munger Trail bridge would be left as is. The culvert that goes under TH 23 and the Munger Trail was unable to be constructed under this project. It was added to SP 6910-103 in FY 2021.

The work in this project was previously included in SP 6910-89. The project was divided to accommodate the construction of a bridge at Knowlton Creek.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2014

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 8.6	\$ 12.3
Other Construction Elements:	\$ 0.7	\$ 0.3
Engineering:	\$ 1.4	\$ 1.3
Right of Way:	\$ 0.8	\$ 0.3
<b>Total:</b>	<b>\$ 11.5</b>	<b>\$ 14.2</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

The base estimate was prepared in March 2014 and includes costs for bituminous milling and paving, bridge construction, drainage improvements, signal construction and ADA improvements. The project was let in April 2016. The current estimate was based off the actual cost from SWIFT fall 2017. This includes additional costs for bridge construction, slope repairs, sidewalk and some pavement reconstruction. First year of substantially complete costs are verified.

## Project Risks

The project is complete. There are no remaining risks.

## Schedule

Environmental Approval Date: 2/25/2015  
 Municipal Consent Approval Date: 8/27/2014  
 Geometric Layout Approval Date: 8/29/2014  
 Construction Limits Established Date: 4/1/2015  
 Original Letting Date: 02/26/2016  
 Current Letting Date: 4/22/2016  
 Construction Season: May 2016 - August 2017  
 Estimated Substantial Completion: Spring 2017



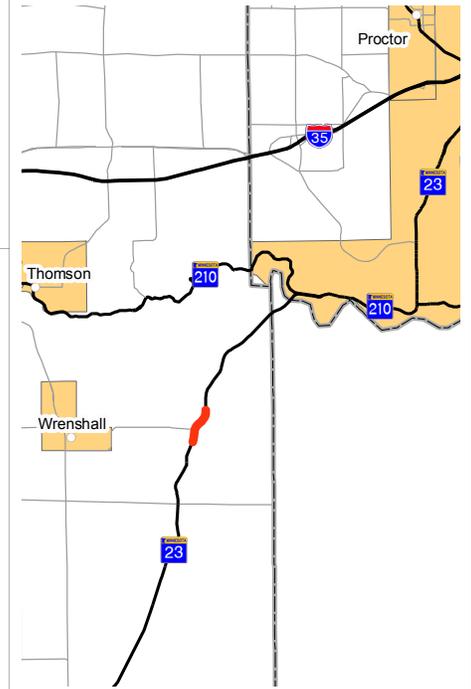
Minnesota Department of Transportation  
 District 1  
 1123 Mesaba Ave  
 (218) 725-2700

**District Engineer:** Duane Hill  
**Project Manager:** Derek Fredrickson  
**Revised Date:** 12/15/2016

# PROJECT SUMMARY

Hwy 23  
 Hwy 23 near intersection with County Road 18  
 Bridge 5470  
 State Project No. 0901-67

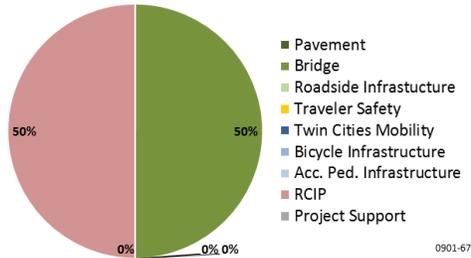
NA  
**Substantially Complete**



## Primary Purpose

Performance-based Need: Bridge condition

## Investment Category



## Project Description

This project replaces the bridge that carries Hwy 23 over the Burlington Northern Santa Fe railroad. The bridge is being constructed on a new alignment so the existing bridge can continue to be used during construction. The project is located approximately 16 miles NE of the south Carlton County line.

## Recent Changes and Updates

Project was completed in November 2016

## Project History

This project is in its second year of construction and is on schedule for a November 2016 completion.

This two-year project started in 2015. MnDOT needed to coordinate the development of this project with the BNSF railroad.

Bridge 5470 was built in 1936 and consists of a steel beam span with a cast in place concrete deck. This bridge is classified as structurally deficient. In 1973 the bridge received repairs to the deck, abutments, pier caps, and new concrete.

A conceptual sketch was developed and shared with the railroad in August 2013. The project impacts a local township road and MnDOT has met and coordinated with the local government.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2011

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 5.0	\$ 3.2
Other Construction Elements:	\$ 0.2	\$ 0.3
Engineering:	\$ 1.0	\$ 0.7
Right of Way:	\$ 0.1	\$ 0.1
<b>Total:</b>	<b>\$ 6.3</b>	<b>\$ 4.3</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

The project was let in December of 2014. The project cost was reduced from the base cost as result of refining the roadway alignment and bridge design. The current estimate was based off of actual cost from SWIFT fall 2017. First year of substantially complete costs are verified.

## Project Risks

The project is Completed.

## Schedule

Environmental Approval Date: 09/17/2014  
 Municipal Consent Approval Date: Not Needed  
 Geometric Layout Approval Date: 06/14/2013  
 Construction Limits Established Date: 12/26/2013  
 Original Letting Date: 06/27/2003  
 Current Letting Date: 11/21/2014  
 Construction Season: 2015/2016  
 Estimated Substantial Completion: Fall 2016



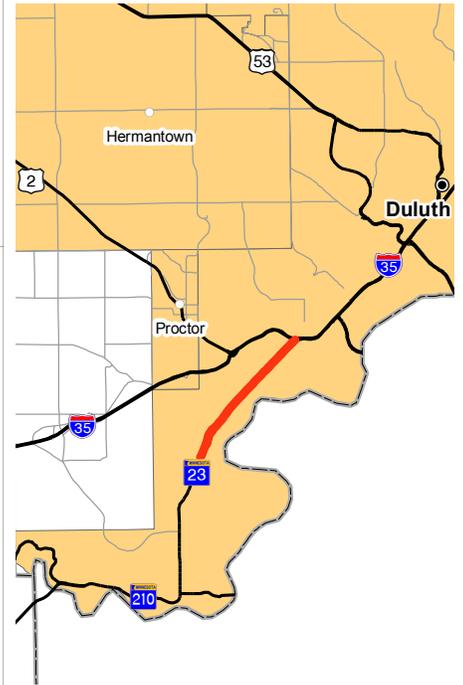
Minnesota Department of Transportation  
 District 1  
 1123 Mesaba Ave  
 (218) 725-2700

**District Engineer:** Duane Hill  
**Project Manager:** Michael Kalnbach

**Revised Date:** 12/15/2016

## PROJECT SUMMARY

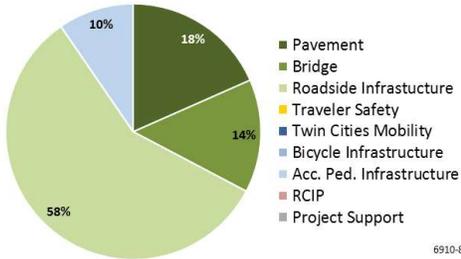
Hwy 23  
I-35 to Becks Road  
Bridge 88544A  
State Project No. 6910-89  
NA  
**Substantially Complete**



### Primary Purpose

Performance-based Need: Pavement Condition, Bridge Condition, Regional and Community Improvement Priority: CIMS

### Investment Category



6910-89

### Project Description

This is an urban project in West Duluth, 5 miles long, on Hwy 23 from I-35 to Becks Road. The work includes pavement resurfacing, bridge construction over Kingsbury Creek, and drainage, safety, and sidewalk improvements.

### Recent Changes and Updates

This project was substantially completed in the spring 2016.

### Project History

This project was let in April 2015 and is currently under construction.

In June 2013, Duluth was awarded a Corridor Investment Management Strategy grant in the amount of \$3.035 million. The CIMS elements will be constructed from I-35 to Becks Road. The pavement repairs under this project will be from I-35 to 83rd Avenue West.

The 2012 District 1 Remaining Service Life map shows this section is in poor condition (0-3 years). Pavement, drainage and pedestrian improvements are needed.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2012

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 11.4	\$ 10.4
Other Construction Elements:	\$ 0.5	\$ 0.6
Engineering:	\$ 2.4	\$ 2.2
Right of Way:	\$ 0.6	\$ 1.7
<b>Total:</b>	<b>\$ 14.9</b>	<b>\$ 14.9</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

The project was let in April 2015. The current estimate is based on the bid cost. The project includes \$3.035 million for CIMS work. These dollars were used for construction, purchase of right of way and engineering work. Second year of substantially complete costs are verified.

### Project Risks

The project is complete. There are no remaining risks.

### Schedule

Environmental Approval Date: 03/10/2015  
Municipal Consent Approval Date: 08/27/2014  
Geometric Layout Approval Date: 08/29/2014  
Construction Limits Established Date: 12/02/2013  
Original Letting Date: 02/27/2015  
Current Letting Date: 04/24/2015  
Construction Season: May 2015 /November 2015  
Estimated Substantial Completion: Spring 2016

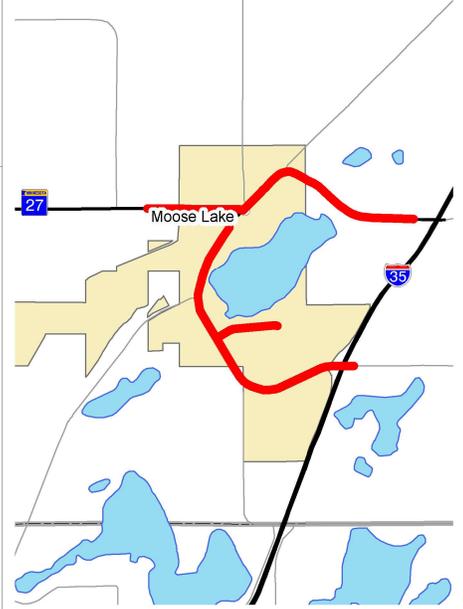


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**District Engineer:** Duane Hill  
**Project Manager:** Derek Fredrickson  
**Revised Date:** 12/15/2016

## PROJECT SUMMARY

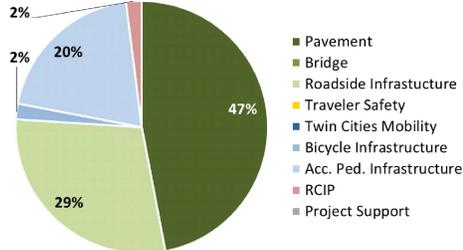
Hwy 27, 73 & 289  
Moose Lake Area  
Bridge NA  
State Project No. 8821-200  
NA



### Primary Purpose

Performance-based Need: Pavement Condition

### Investment Category



### Project Description

The project is in the City of Moose Lake on Hwys 27, 73 and 289 between the north and south junctions of I-35 and on Hwy 27/73 to the west limits. Work includes pavement rehabilitation, turn lanes, ADA and drainage improvements. Moose Lake will upgrade utilities under a cooperative agreement.

### Recent Changes and Updates

This project is now tied to SP 0908-25, This is a tied project is for the construction of a roundabout at the intersection of TH 73 and County Road 10.

### Project History

The pavement is in poor condition on Hwy 27, Hwy 73 and Hwy 289.

Turn lanes will be constructed on Hwy 73 at sites of new development in the corridor. Plans are at 80% completion.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2014

	Baseline Est.	Current Est.
Construction Letting:	\$ 3.2	\$ 7.1
Other Construction Elements:	\$ 0.2	\$ 0.6
Engineering:	\$ 0.6	\$ 1.5
Right of Way:	\$ 0.0	\$ 0.1
<b>Total:</b>	<b>\$ 4.0</b>	<b>\$ 9.3</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

This project was let in March 2017. The current estimate is based on the actual bid amount. The cost increase is because of the need to replace pavement and curb and gutter through some of the urban sections rather than simply resurfacing. Other added improvements include sidewalk replacement, turn lane construction, signal system revision at Hwy 61 and more extensive storm sewer reconstruction and repair. The bid amount also included S.P. 0908-25, for constructing a roundabout at CSAH 10. The bid amount also includes local costs.

### Project Risks

Project risks include unknown construction conditions, wetland permit and weather in 2017 for one season construction.

### Schedule

Environmental Approval Date: 2-6-17  
Municipal Consent Approval Date: 09/14/2016  
Geometric Layout Approval Date: Not Needed  
Construction Limits Established Date: 07/14/2016  
Original Letting Date: 04/28/2017  
Current Letting Date: 03/24/2017  
Construction Season: 2017  
Estimated Substantial Completion: Fall 2017



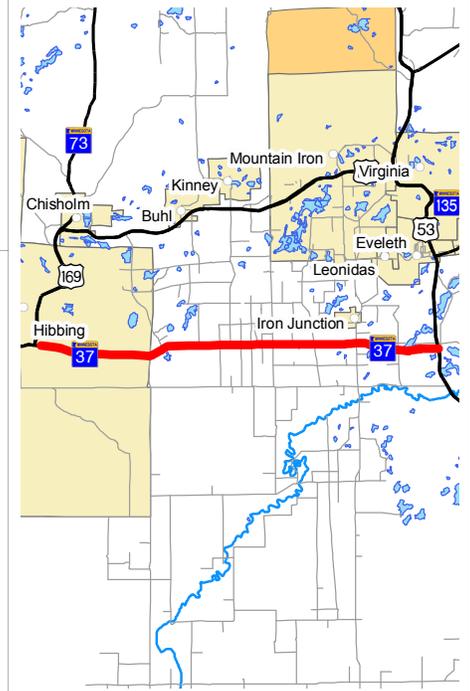
Minnesota Department of Transportation  
District 1  
1123 Mesaba Ave  
(218) 725-2700

District Engineer: Duane Hill  
Project Manager: Doug Kerfeld

Revised Date: 12/15/2016

# PROJECT SUMMARY

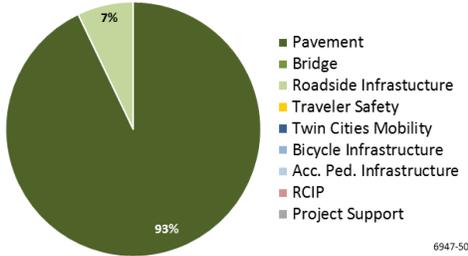
Hwy 37  
 From Highway 169 in Hibbing to Highway 53  
 Bridge NA  
 State Project No. 6947-50  
 NA



## Primary Purpose

Performance-based Need: Pavement Condition

## Investment Category



## Project Description

Pavement resurfacing and drainage improvements on Highway 37 from Hibbing to the interchange with Highway 53.

## Recent Changes and Updates

The project is currently under construction and is anticipated to be complete in fall 2017

## Project History

This segment of roadway was originally graded and paved in 1950. Since then, there were numerous spot improvements performed. Most recently, a resurfacing was performed on the west half in 1995 and the east half was resurfaced in 2001. A project scoping report was completed in January 2015.

The Original letting date was changed to meet balanced letting requirements. The project is currently in the final design phase and is on schedule for letting in December 2016.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2014

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 4.2	\$ 4.2
Other Construction Elements:	\$ 0.4	\$ 0.4
Engineering:	\$ 0.8	\$ 1.0
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 5.4</b>	<b>\$ 5.6</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

This job was let in December 2016. The current estimate is based on actual bid letting amounts. The estimate includes costs for pavement resurfacing and drainage improvements.

## Project Risks

There is the potential for contaminated materials at a former gas station at the intersection of South County Road 25.

## Schedule

Environmental Approval Date: 12-12-16  
 Municipal Consent Approval Date: Not Needed  
 Geometric Layout Approval Date: Not Needed  
 Construction Limits Established Date: Pending Approval  
 Original Letting Date: 05/19/2017  
 Current Letting Date: 12/16/2016  
 Construction Season: 2017  
 Estimated Substantial Completion: Fall 2017



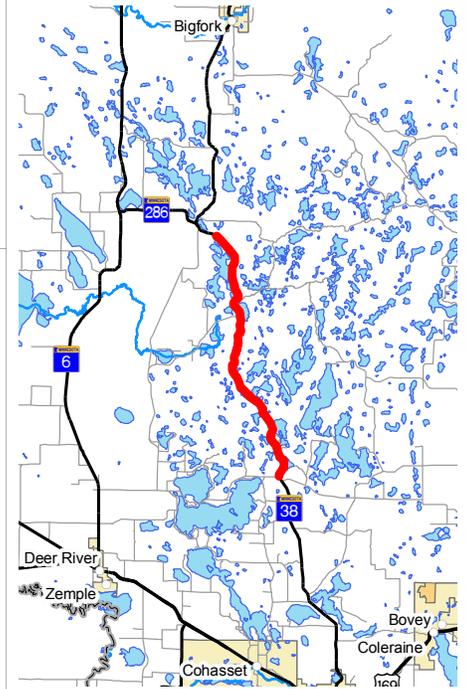
Minnesota Department of Transportation  
 District 1  
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 (218) 725-2700

**District Engineer:** Duane Hill  
**Project Manager:** Randy Costley

**Revised Date:** 12/15/2016

# PROJECT SUMMARY

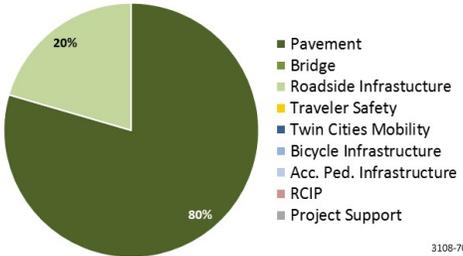
Hwy 38  
 County Road 19 to the City of Marcell  
 Bridge NA  
 State Project No. 3108-70  
 NA



## Primary Purpose

Performance-based Need: Pavement Condition

## Investment Category



3108-70

## Project Description

The project is 14 miles long, from County Road 19 to the City of Marcell. The work consists of pavement resurfacing, drainage and other road improvements. The project also includes intersection improvements at the Highway 38 intersections with both County Road 48 and County Road 49. This segment of Hwy 38 was originally graded in the late 1920s and included a gravel surface. In the late 1940s improvements were made including numerous spot overlays, additional gravel and a bituminous surface. Continued construction and maintenance projects occurred over time, with the most recent bituminous overlay completed in 2000.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2014

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 12.2	\$ 11.7
Other Construction Elements:	\$ 1.0	\$ 0.8
Engineering:	\$ 2.3	\$ 2.3
Right of Way:	\$ 0.3	\$ 1.5
<b>Total:</b>	<b>\$ 15.8</b>	<b>\$ 16.3</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Recent Changes and Updates

The project design on Highway 38 took longer than anticipated due to District 2 workload. In addition, there were two intersection improvements projects requiring project coordination with Itasca County. Additional time was required to complete the Highway 38 design and the incorporation of the Itasca County Road 48 and County Road 49 improvements in the State Project. This extra time resulted in moving the letting date from October 2017 to December 2017.

## Project History

The project design is on schedule for delivery in March 2017, however the Right of Way Acquisition Process has taken longer than anticipated resulting in the need to move the Construction Letting Date to fall 2017 with construction scheduled for 2018. The Environmental Assessment required for property acquisition in the Chippewa National Forest was started in 2015. The purpose of this project is to recondition and resurface the existing highway to improve ride quality, extend the useful life of the highway, and reduce maintenance costs.

## Key Cost Estimate Assumptions

The baseline estimate was completed in June 2013. The current cost estimate was updated in August 2017. Both estimates include costs for bituminous resurfacing and other road improvements. The current construction letting cost was lowered because of less subgrade correction needed. There has been an increase to the projected Right of Way acquisition cost.

## Project Risks

Project risks related to project schedule include the completion of the Right of way Acquisition process prior to project letting and receiving a Corp of Engineers Permit for Wetlands.

## Schedule

Environmental Approval Date: 5-16-17  
 Municipal Consent Approval Date: Not Needed  
 Geometric Layout Approval Date: Not Needed  
 Construction Limits Established Date: 3/14/2016  
 Original Letting Date: 01/02/2009  
 Current Letting Date: 12/15/2017  
 Construction Season: 2018  
 Estimated Substantial Completion: Fall 2018



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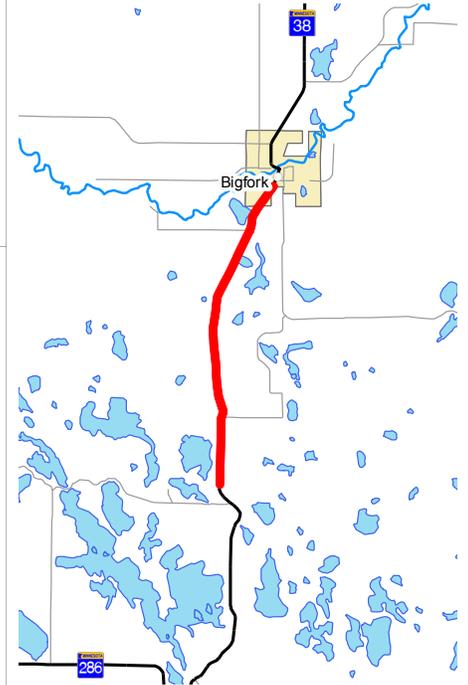
**District Engineer:** Duane Hill  
**Project Manager:** Michael Kalnbach

**Revised Date:** 12/15/2016

## PROJECT SUMMARY

Hwy 38 & Hwy 286

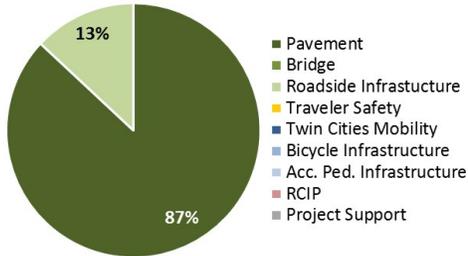
On Hwy 38 from Horseshoe Lake Rd to Bigfork and on Hwy 286 from Hwy 6 to Marcell  
 Bridge NA  
 State Project No. 3108-76



### Primary Purpose

Performance-based Need: Pavement condition

### Investment Category



### Project Description

The project is on Hwy 38 from Horseshoe Lake Rd to Bigfork and on Hwy 286 from Hwy 6 to Marcell. The work includes bituminous resurfacing and drainage improvements.

### Recent Changes and Updates

The project was constructed in the summer of 2017.

### Project History

There are two segments of this project:

1) Hwy 286 was originally graded in 1941 and initially paved in 1949. Since 1949, there have been two bituminous overlay projects in addition to one bituminous spot overlay project. The two overlays were completed in construction years 1968 and 1998. 2)

Hwy 38 was originally constructed as a gravel road in 1929. The gravel surface was overlaid and additional shoulder width was added in 1973. It was reconstructed in 1997 and bituminous cracks were sealed in 2000.

The project is currently in the final design phase and is on schedule for letting in February 2017.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2013

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 3.9	\$ 2.0
Other Construction Elements:	\$ 0.3	\$ 0.2
Engineering:	\$ 0.7	\$ 0.6
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 4.9</b>	<b>\$ 2.8</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

This project was let in February 2017. The current estimate is based on the bid amount, and includes costs for a bituminous mill and overlay on Hwy 38 and a bituminous mill and overlay on Hwy 286 as well as drainage improvements. The current cost estimate is lower than the base line estimate due to a lower than anticipated bituminous price, and less of a need for subgrade repair.

### Project Risks

The project pavement was completed in the summer 2017. There are no remaining risks.

### Schedule

Environmental Approval Date: 11-14-16  
 Municipal Consent Approval Date: Not Needed  
 Geometric Layout Approval Date: Not Needed  
 Construction Limits Established Date: Pending Approval  
 Original Letting Date: 01/27/2017  
 Current Letting Date: 02/24/2017  
 Construction Season: 2017  
 Estimated Substantial Completion: Summer 2017



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 1123 Mesaba Ave  
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**District Engineer:** Duane Hill  
**Project Manager:** Randy Costley

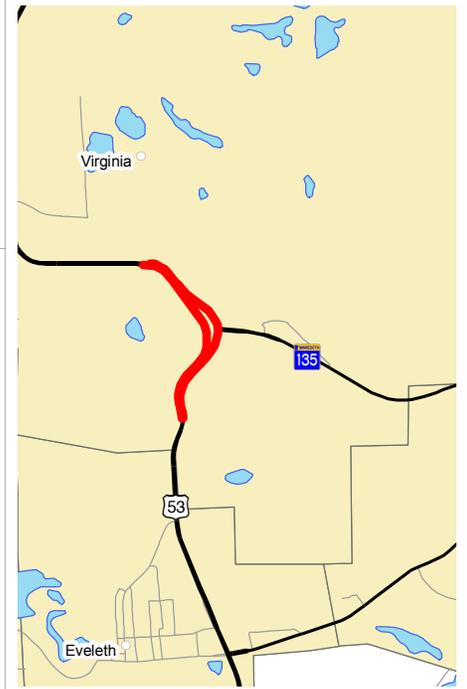
**Revised Date:** 12/15/2016

## PROJECT SUMMARY

Hwy 53

Between Eveleth and Virginia, relocate Hwy 53 away from United Taconite Operations

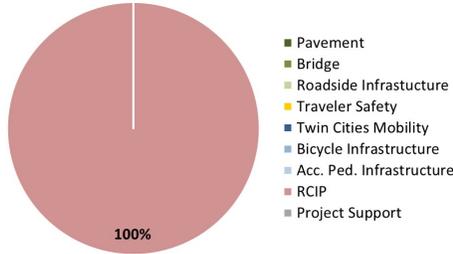
Bridge 69129, &, 69130  
State Project No. 6918-86



### Primary Purpose

Regional & Community Improvement Priority

### Investment Category



### Project Description

The project is located in St. Louis County, between Eveleth and Virginia. The proposed project is to abandon Hwy 53 in the area of the United Taconite mine expansion and reconstruct it in a new location. State Project 6918-86 (which is also included in the 6918-80 project scope) is all remaining grading on Hwy 53 & Hwy 135, including a bridge on Hwy 135 over Hwy 53.

### Recent Changes and Updates

August 18, 2017: Project is 93.5% complete. The new route will be open to traffic mid-September 2017. Once open, the existing highway infrastructure will be removed to make way for taconite mining. There will be final clean-up and minor work in spring 2018. The project is currently one month ahead of schedule.

### Project History

The Environmental Impact Statement and Record of Decision was completed in fall 2015. MnDOT negotiated an extension of the existing Highway 53 until Nov. 15, 2017. Kiewit Infrastructure Corporation was contracted to construct alternative E2 around and across the Rouchleau Pit. Construction started Nov. 2, 2015 and is nearing 50% complete. Traffic is scheduled to be on the new highway and the old highway infrastructure will be removed. Project completion is scheduled for summer of 2018. In 1960 United States Steel granted MnDOT Hwy easement rights for Hwy 53. In 2010, the successors of US Steel, United Taconite and RGGS Land and Minerals gave MnDOT notice that they were terminating easement rights for Hwy 53, which expires on May 5, 2017.

### Schedule

Environmental Approval Date: Fall 2015  
Municipal Consent Approval Date: 04/14/2015  
Geometric Layout Approval Date: 04/20/2015  
Construction Limits Established Date: Spring 2015  
Original Letting Date: 04/24/2015  
Current Letting Date: 10/21/2015  
Construction Season: 2016/2017  
Estimated Substantial Completion: Fall 2017

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2011

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 60.0	\$ 156.4
Other Construction Elements:	\$ 13.8	\$ 11.8
Engineering:	\$ 14.4	\$ 44.5
Right of Way:	\$ 0.0	\$ 18.3
<b>Total:</b>	<b>\$ 88.2</b>	<b>\$ 231.0</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

Aug. 17, 2017: Current construction cost is projected to remain at \$162.4 million. This includes extra work required to complete the project within the project limits by MnDOT, City of Virginia, Virginia PUC and the Mesabi Trail. Major items include: Removal of bridges 69007 & 69008 (inadvertently left out of plans), unanticipated regulated waste cleanup, changes in City utilities and additional excavation and backfill of unsuitable soils. Total estimate after letting is \$244.8 million. This total includes all MnDOT costs for the above categories and construction cost for City of Virginia and VPUC utilities and relocation of the Mesabi Trail. The original project estimate was a high level estimate for the proposed M1 alternative when the project was placed in the STIP. Subsequent engineering on M1 route has identified additional challenges on this route that increase the cost. MnDOT is currently targeting a total project cost estimate of \$240 million based on what is known today.

### Project Risks

Aug. 17, 2017: Remaining risk: Vacating the existing easement by Nov. 15, 2017 (currently one month ahead of schedule). All other risks have been retired.



Minnesota Department of Transportation  
District 1  
1123 Mesaba Ave  
(218) 725-2700

**District Engineer:** Duane Hill  
**Project Manager:** Patrick Huston

**Revised Date:** 12/15/2016

# PROJECT SUMMARY

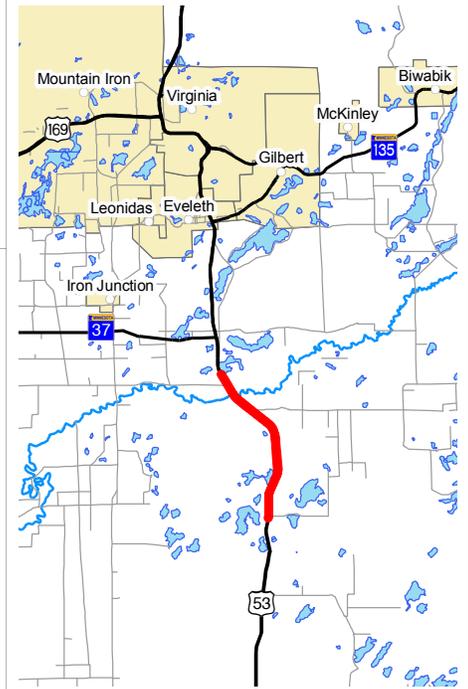
Hwy 53

On Hwy 53 from Central Lakes Road to the interchange with Hwy 37

Bridge NA

State Project No. 6917-142

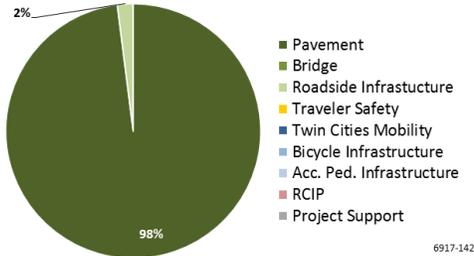
**Substantially Complete**



## Primary Purpose

Performance-based Need: Pavement condition

## Investment Category



## Project Description

The project includes pavement rehabilitation work on northbound Hwy 53 from Central Lakes Road to the interchange with Hwy 37, and on southbound Hwy 53 from South Moon Lake Dr. to the interchange with Hwy 37.

## Recent Changes and Updates

The project was constructed in the summer of 2016.

## Project History

This segment of roadway was originally graded and paved with concrete in the early 1920s. In the late 1940s it was widened and paved with bituminous. There were also bituminous overlays in the late 1960s and 1970s. The most recent improvements included a mill and overlay in 1996.

This project will recondition and resurface the existing highway to improve the ride and extend the useful life of the highway.

Due to rapidly deteriorating pavement condition, the project limits were increased, adding approximately 11 miles of pavement rehabilitation to the project and the letting date was moved from 4/28/17 to 7/22/16. The project design is complete, the project has been let, and construction is scheduled to occur in the fall of 2016.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2013

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 6.5	\$ 3.7
Other Construction Elements:	\$ 0.5	\$ 0.1
Engineering:	\$ 1.2	\$ 0.3
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 8.2</b>	<b>\$ 4.1</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

The baseline estimate was prepared in August 2013 and includes costs for pavement resurfacing. The project was let in July of 2016. The current estimate was based off the actual cost from SWIFT fall 2017. The cost decrease is due to the removal of repair work at the Anchor Lake Rest Area. First year of substantially complete costs are verified.

## Project Risks

The project is substantially complete. There are no remaining risks.

## Schedule

Environmental Approval Date: 5/13/2016  
 Municipal Consent Approval Date: Not Needed  
 Geometric Layout Approval Date: Not Needed  
 Construction Limits Established Date: Not Needed  
 Original Letting Date: 04/28/2017  
 Current Letting Date: 7/22/2016  
 Construction Season: SUMMER 2016 FALL 2016  
 Estimated Substantial Completion: Summer 2016



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**District Engineer:** Duane Hill  
**Project Manager:** Randy Costley

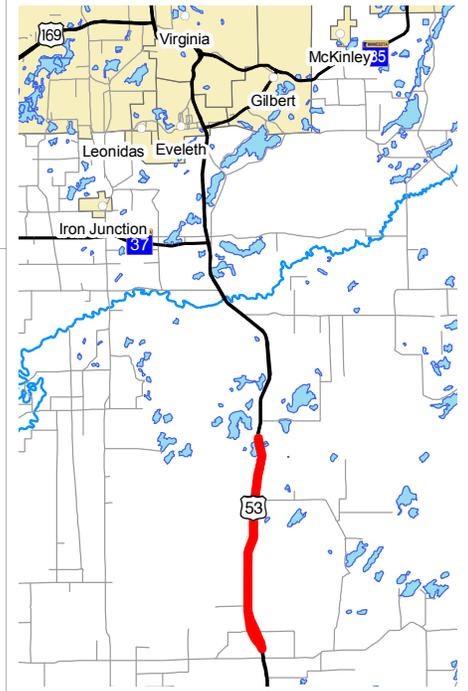
**Revised Date:** 12/15/2016

# PROJECT SUMMARY

Hwy 53

Southbound from the Paleface River to Augusta Lake Rd  
 Bridge 69022, and, 69071  
 State Project No. 6917-141

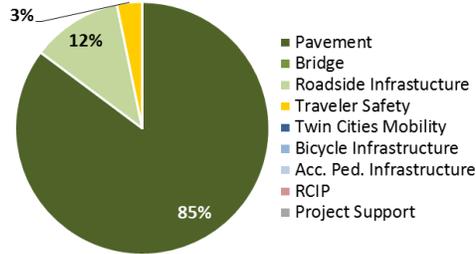
NA  
**Substantially Complete**



## Primary Purpose

Performance-based Need: Pavement condition

## Investment Category



## Project Description

The project is located on southbound Highway 53 from the Paleface River to Augusta Lake Rd. The work includes 9 miles of pavement resurfacing and drainage improvements.

## Recent Changes and Updates

The project was constructed in the summer of 2016.

## Project History

This segment of Hwy 53 was resurfaced numerous times including overlays in 1978, 1987 and 1996. Most recently, in 2000, the bituminous cracks on this segment were sealed.

The project limits have changed to include an additional 3 miles. The recommended pavement thickness has increased from a medium mill and overlay to a thick mill and overlay. The project design is completed and on schedule for letting in December 2015.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2013

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 2.4	\$ 2.2
Other Construction Elements:	\$ 0.2	\$ 0.2
Engineering:	\$ 0.5	\$ 0.2
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 3.1</b>	<b>\$ 2.6</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

The project was let in December of 2015, and completed the summer of 2016. The current estimate was based off of actual cost from SWIFT fall 2017. The price decrease from the baseline estimate is due to lower than anticipated bituminous costs. First year of substantially complete costs are verified.

## Project Risks

The project is substantially complete. There are no remaining risks.

## Schedule

Environmental Approval Date: 06/01/2015  
 Municipal Consent Approval Date: Not Needed  
 Geometric Layout Approval Date: Not Needed  
 Construction Limits Established Date: Not Needed  
 Original Letting Date: 04/25/2014  
 Current Letting Date: 12/18/2015  
 Construction Season: 2016  
 Estimated Substantial Completion: Fall 2016



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 District 1  
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**District Engineer:** Duane Hill  
**Project Manager:** Randy Costley

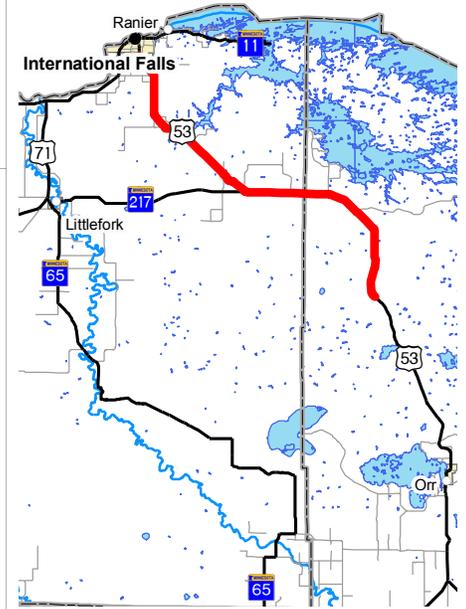
**Revised Date:** 12/15/2016

# PROJECT SUMMARY

Hwy 53

From Keyes Rd to Crescent Dr in International Falls  
 Bridge 36003, and, 69X16  
 State Project No. 3608-49

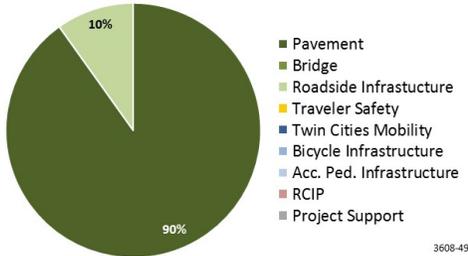
NA  
**Substantially Complete**



## Primary Purpose

Performance-based Need: Pavement condition

## Investment Category



3608-49

## Project Description

The project is 34 miles long, from south of Keyes Rd to Crescent Dr in International Falls. The work includes pavement resurfacing, bridge deck repairs and drainage improvements. In addition, the project includes safety improvements at two intersections.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2014

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 14.2	\$ 10.1
Other Construction Elements:	\$ 1.3	\$ 1.2
Engineering:	\$ 2.8	\$ 0.7
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 18.3</b>	<b>\$ 12.0</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Recent Changes and Updates

Project was completed the September 2015.

## Project History

This project is under construction and is on schedule for completion in early fall 2015.

The southernmost 18 miles had a bituminous overlay in the mid 1990s and a crack repair project in the late 1990s. The next 12 miles included a bituminous milling and paving project in 2000 and a crack repair project in 2001. The northernmost three miles had numerous bituminous overlays performed over portions of this segment between the 1960s and the 1980s.

The project was added for construction in 2015 as part of MAP-21 program.

The pavement repairs on this project are to include milling with a bituminous overlay. In addition to the pavement repairs, these improvements will be included: the addition of a center left turn lane at two intersections, bridge deck repairs, and a large box culvert will be replaced.

## Key Cost Estimate Assumptions

The project was let in January 2015. The baseline cost was established with a high contingency prior to scoping. National Corridor Infrastructure Program Funds were used for the turn lane construction. Current Estimate based off of "Costs of Projects in Second Year of Substantial Completion (Final Year in Report)" 8/30/2016. Second year of substantially complete costs are verified.

## Project Risks

The project is complete. There are no remaining risks.

## Schedule

Environmental Approval Date: 11/03/2014  
 Municipal Consent Approval Date: Not Needed  
 Geometric Layout Approval Date: Not Needed  
 Construction Limits Established Date: 8/20/2014  
 Original Letting Date: 01/23/2015  
 Current Letting Date: 01/30/2015  
 Construction Season: 2015  
 Estimated Substantial Completion: Fall 2015



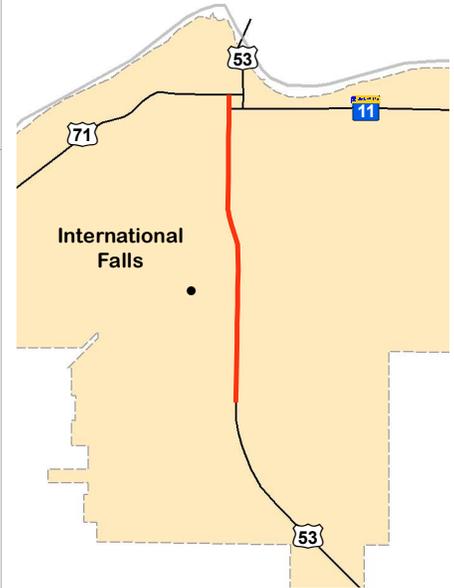
Minnesota Department of Transportation  
 District 1  
 1123 Mesaba Ave  
 (218) 725-2700

**District Engineer:** Duane Hill  
**Project Manager:** Brian Larson

**Revised Date:** 12/15/2016

## PROJECT SUMMARY

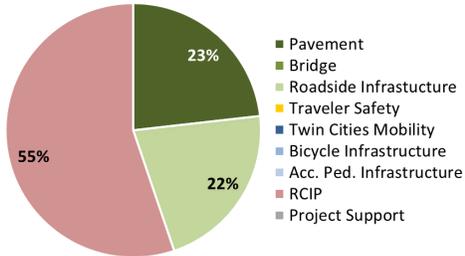
Hwy 53  
In the city of International Falls  
Bridge NA  
State Project No. 3608-48  
NA



### Primary Purpose

Performance-based need: Pavement Condition

### Investment Category



### Project Description

Project length is 1.6 miles. The project work includes pavement rehabilitation, storm sewer replacement, traffic signals & ADA accessibility improvements. The ADA improvements will result in replacement of all curb and gutter and sidewalk.

### Recent Changes and Updates

A consultant was hired to help deliver this project. Meetings with individuals from International Falls began September 2017 to help define the future vision for the highway. A "complete streets" approach is being used.

### Project History

Originally programmed for funding in FY 2015, the project was deferred due to funding constraints. Complying with ADA requirements required significant sidewalk and curb and gutter replacement that could not be funded in FY 2015 so the project was moved to FY 2020. The new cost estimate reflects complying with ADA requirements and results in the project now falling in the Major Projects category. The need for this project is driven by deteriorating pavement resulting in a rough ride, high maintenance costs, and reduced load carrying capacity. The majority of the project area was last resurfaced in 1999. The 2015 pavement condition rating indicates the Ride Quality Index varies from Fair to Poor.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 7/1/2014

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 5.3	\$ 5.1
Other Construction Elements:	\$ 0.4	\$ 0.4
Engineering:	\$ 1.0	\$ 1.0
Right of Way:	\$ 0.1	\$ 0.1
<b>Total:</b>	<b>\$ 6.8</b>	<b>\$ 6.6</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

The base estimate was prepared in March 2016. The and current cost estimate was completed in June 2017. Both estimates include costs for pavement rehabilitation, storm sewer replacement, traffic signals & ADA accessibility improvements.

### Project Risks

Municipal consent from International Falls and International Falls level of funding under the Cooperative Construction Agreement

Risk of encountering contaminated soils in International Falls could impact cost.

Need for additional Right of Way or Temporary Rights to Construct so that ADA improvements can be made could impact schedule.

Maintaining access to businesses from Hwy. 53 during construction may be difficult resulting in potential controversy.

### Schedule

Environmental Approval Date: Pending approval  
Municipal Consent Approval Date: Pending approval  
Geometric Layout Approval Date: Pending approval  
Construction Limits Established Date: Pending approval  
Original Letting Date: 4/24/15  
Current Letting Date: 10/25/2019  
Construction Season: Spring 2020 -Fall 2020  
Estimated Substantial Completion: Fall 2020



Minnesota Department of Transportation  
District 1  
1123 Mesaba Ave  
(218) 725-2700

**District Engineer:** Duane Hill  
**Project Manager:** Brian Larson

**Revised Date:** 12/15/2016

## PROJECT SUMMARY

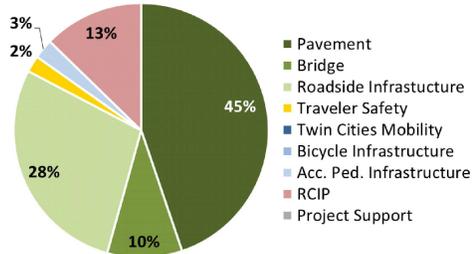
Hwy 61  
 Around Grand Marais  
 Bridge 8295, 8294  
 State Project No. 1602-50  
 NA



### Primary Purpose

Pavement condition.

### Investment Category



### Project Description

This is an urban/rural project. Project length is 11.23 miles. Grand Marais urban reconstruction, box culvert replacement, pavement rehabilitation, road diet, accessibility improvements, & replace traffic signal. Project includes pavement rehabilitation north and south of Grand Marais.

### Recent Changes and Updates

Layout is being developed to include City trail from 8th Avenue West to the Gunflint Trail (8th Avenue E).

### Project History

This project was programmed as a pavement rehabilitation. The City of Grand Marais received a TAP grant to extend the trail system. The trail will be incorporated into state's plan.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 7/1/2017

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 8.5	\$ 8.5
Other Construction Elements:	\$ 0.7	\$ 0.7
Engineering:	\$ 1.7	\$ 1.7
Right of Way:	\$ 0.1	\$ 0.1
<b>Total:</b>	<b>\$ 11.0</b>	<b>\$ 11.0</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

The base and current cost estimate were prepared in February 2016 before the final scoping document was completed. The estimate includes costs for urban reconstruction, pavement rehabilitation, accessibility improvements, and box culvert replacement.

### Project Risks

Project risks include city and county costs, utility conflicts, environmental permits, and municipal consent.

### Schedule

Environmental Approval Date: Pending  
 Municipal Consent Approval Date: Pending  
 Geometric Layout Approval Date: Pending Approval  
 Construction Limits Established Date: 7/27/2017  
 Original Letting Date: 12/21/2018  
 Current Letting Date: 12/21/2018  
 Construction Season: SPRING 2019-FALL 2020  
 Estimated Substantial Completion: FALL 2020



Minnesota Department of Transportation  
 District 1  
 1123 Mesaba Ave  
 (218) 725-2700

District Engineer: Duane Hill  
 Project Manager: Michael Kalnback

Revised Date: 12/15/2016

## PROJECT SUMMARY

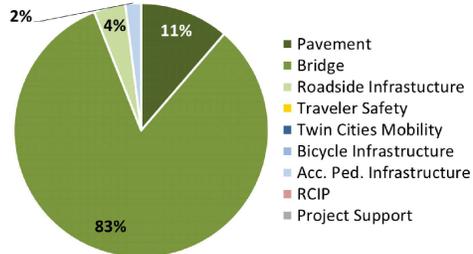
Hwy 61  
Hwy 61 Silver Creek Crossing  
Bridge 5648  
State Project No. 3805-79  
NA



### Primary Purpose

Bridge and pavement preservation.

### Investment Category



### Project Description

Project length is 0.9 miles. Hwy 61 realignment & bridge replacement at Silver Creek.

### Recent Changes and Updates

Discussions continue with the Minnesota Department of Natural Resources on trail needs under and across the new bridge.

Construction Season updated to more accurately reflect actual month of start and complete.

### Project History

The Scoping Document was signed on Mar. 30, 2016. The project includes building a new bridge over Silver Creek and realigning TH 61 to accommodate the new bridge placement. The existing structure is two 10' by 10' box culverts. Silver Creek is a trout stream and is one of the top three priorities for the DNR to have converted into a natural bottom.

Bridge #5648 has deteriorated, and needs to be replaced. The pavement in the project area has deteriorated and is in the need of preventative maintenance to restore ride quality, which is part of the statewide plan to replace or improve deficient bridges on state highways, and also to improve ride and extend the useful life of the highway.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 11/5/2014

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 4.7	\$ 4.7
Other Construction Elements:	\$ 0.3	\$ 0.3
Engineering:	\$ 0.9	\$ 0.9
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 5.9</b>	<b>\$ 5.9</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

The base/current estimate was prepared in March 2016, and includes costs for new pavement and a new bridge. This project's TPCE just recently hit the threshold for the MPR and this represents the first year this is in the report.

### Project Risks

Bridge and highway embankment costs are dependent on the presence of rock and muck.

The Minnesota Department of Natural Resources requested a bike trail under the bridge and across the bridge. The funding from the DNR is a risk.

If right of way acquisition is needed for the project, the cost to acquire the right of way is a risk.

### Schedule

Environmental Approval Date: Pending Approval  
Municipal Consent Approval Date: Not Needed  
Geometric Layout Approval Date: Pending Approval  
Construction Limits Established Date: Pending Approval  
Original Letting Date: 1/27/17  
Current Letting Date: 1/31/2020  
Construction Season: May 2020 - November 2020  
Estimated Substantial Completion: FALL 2020



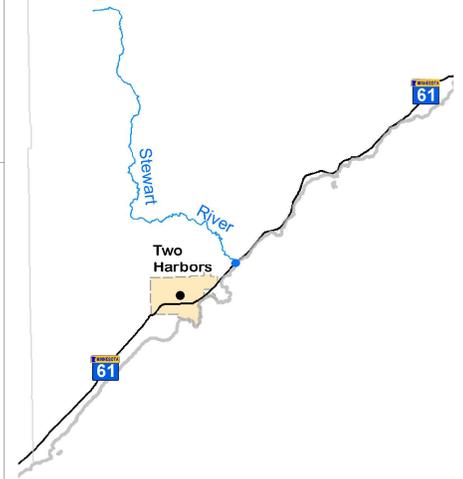
Minnesota Department of Transportation  
District 1  
1123 Mesaba Ave  
(218) 725-2700

District Engineer: Duane Hill  
Project Manager: Derek Fredrickson

Revised Date: 12/15/2016

## PROJECT SUMMARY

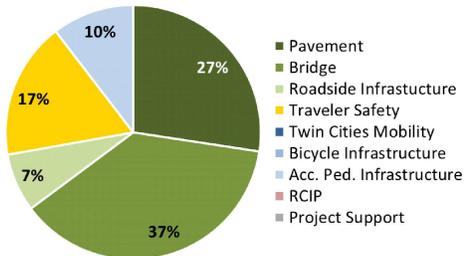
Hwy 61  
Hwy 61 at Stewart River  
Bridge 3589  
State Project No. 3805-99  
NA



### Primary Purpose

Bridge preservation.

### Investment Category



### Project Description

Rehabilitation of Hwy 61 bridge over the Stewart River. This bridge is designated as a historic bridge so more work is necessary to determine what the full project description will be.

### Recent Changes and Updates

The draft project purpose and need has been determined. A consultant was hired during the summer of 2017 to perform an alternatives analysis study and environmental document. This will aid in developing the project scope, schedule and budget.

### Project History

The Minnesota Department of Transportation is currently working with the Federal Highway Administration on the Purpose and Need for the project.

This spandrell filled arch was originally constructed in 1924 and widened in 1939. This bridge is one of 24 bridges that MnDOT has committed to preserving.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 7/1/16

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 5.2	\$ 5.2
Other Construction Elements:	\$ 0.4	\$ 0.4
Engineering:	\$ 1.0	\$ 1.0
Right of Way:	\$ 0.2	\$ 0.2
<b>Total:</b>	<b>\$ 6.8</b>	<b>\$ 6.8</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

The base/current cost estimate was prepared in February 2016 and includes cost for bridge repair.

### Project Risks

The Purpose and Need will help determine the scope and budget for this project. Risks will be identified after the Scoping Document is completed.

Traffic handling during construction will be a major risk depending on the project scope.

### Schedule

Environmental Approval Date: pending approval  
Municipal Consent Approval Date: Not Needed  
Geometric Layout Approval Date: Need Unknown  
Construction Limits Established Date: Need Unknown  
Original Letting Date: 1/1/16  
Current Letting Date: 1/31/2020  
Construction Season: SPRING 2020-FALL2020  
Estimated Substantial Completion: FALL 2020

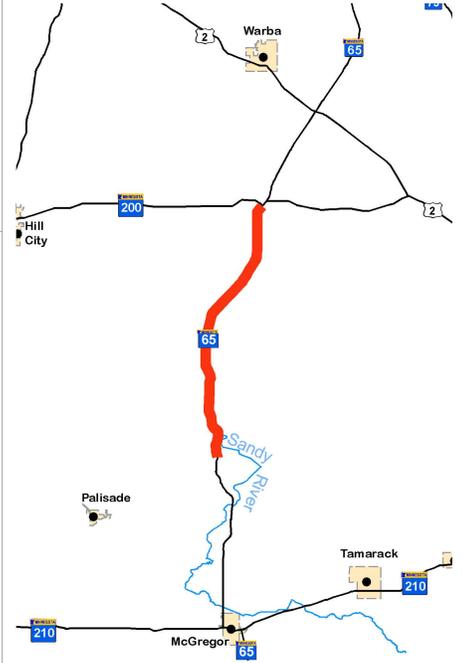


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District 1  
1123 Mesaba Ave  
(218) 725-2700

District Engineer: Duane Hill  
Project Manager: Derek Fredrickson  
Revised Date: 12/15/2016

## PROJECT SUMMARY

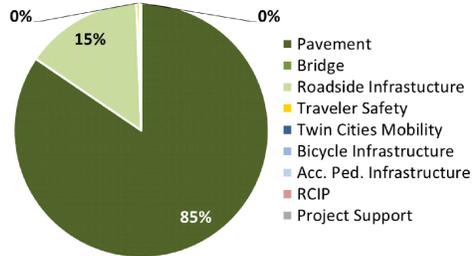
Hwy 65  
 South Sandy River to Hwy 200  
 Bridge NA  
 State Project No. 0112-52  
 NA



### Primary Purpose

Pavement condition.

### Investment Category



### Project Description

Project length is 17.05 miles. Bituminous pavement resurfacing

### Recent Changes and Updates

Letting date has changed to Feb. 22, 2019 to better balance district overall program.

### Project History

This project will recondition and resurface the existing highway to improve the ride and extend the useful life of the highway.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 7/1/2015

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 6.8	\$ 6.8
Other Construction Elements:	\$ 0.6	\$ 0.6
Engineering:	\$ 1.3	\$ 1.3
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 8.7</b>	<b>\$ 8.7</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

The base and current cost estimate were prepared in August 2015 and includes costs for bituminous pavement resurfacing.

### Project Risks

Environmental permits for drainage improvements.

### Schedule

Environmental Approval Date: pending approval  
 Municipal Consent Approval Date: Need Unknown  
 Geometric Layout Approval Date: Need Unknown  
 Construction Limits Established Date: pending Approval  
 Original Letting Date: 1/1/18  
 Current Letting Date: 2/22/2019  
 Construction Season: SPRING 2019-NOVEMBER 2019  
 Estimated Substantial Completion: FALL 2019



Minnesota Department of Transportation  
 District 1  
 1123 Mesaba Ave  
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District Engineer: Duane Hill  
 Project Manager: Randy Costley  
 Revised Date: 12/15/2016

## PROJECT SUMMARY

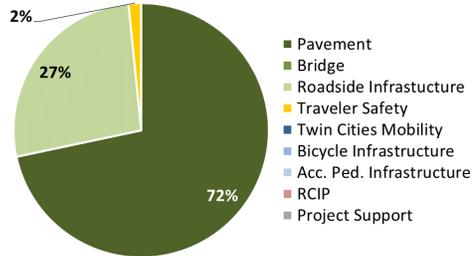
Hwy 65  
Hwy 200 to Hwy 169  
Bridge NA  
State Project No. 3111-30  
NA



### Primary Purpose

Pavement condition.

### Investment Category



### Project Description

Project length is 25.87 miles. Bituminous pavement resurfacing from the Junction of Hwy 200 in Jacobson to Hwy 169 in Pengilly.

### Recent Changes and Updates

Plans are at 90% complete.

### Project History

This project was programmed based on pavement needs.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 7/1/2016

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 11.7	\$ 10.8
Other Construction Elements:	\$ 1.1	\$ 1.0
Engineering:	\$ 2.1	\$ 2.0
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 14.9</b>	<b>\$ 13.8</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

The base estimate were prepared in May 2014 and includes costs for pavement resurfacing. The current estimate was completed in February 2016. The price difference was due to an anticipated decrease in bituminous cost.

### Project Risks

Environmental permits.

### Schedule

Environmental Approval Date: Pending approval  
Municipal Consent Approval Date: Not Needed  
Geometric Layout Approval Date: Not Needed  
Construction Limits Established Date: 3/24/2016  
Original Letting Date: 4/27/18  
Current Letting Date: 5/17/2019  
Construction Season: SUMMER 2019-FALL2019  
Estimated Substantial Completion: FALL 2019



Minnesota Department of Transportation  
District 1  
1123 Mesaba Ave  
(218) 725-2700

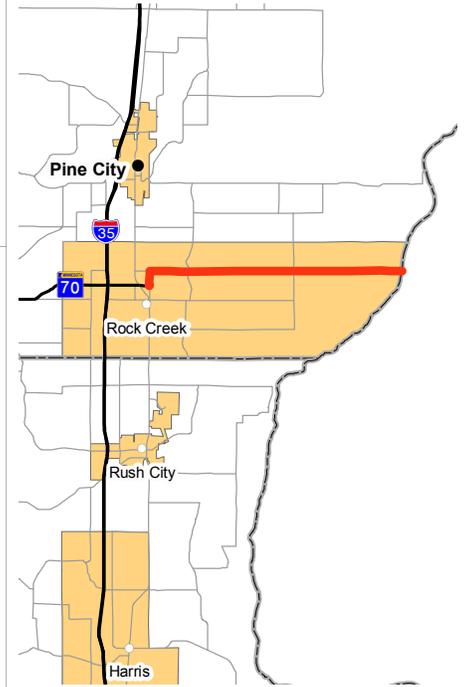
**District Engineer:** Duane Hill  
**Project Manager:** Randy Costley

**Revised Date:** 12/15/2016

## PROJECT SUMMARY

Hwy 70  
Hwy 70 East of Hwy 361 to the Minnesota/Wisconsin state line  
Bridge 58X03  
State Project No. 5811-12

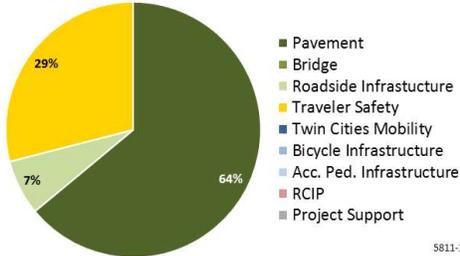
NA  
**Substantially Complete**



### Primary Purpose

Performance-based Need: Pavement Condition and District Safety Plan

### Investment Category



5811-12

### Project Description

The project is a 9 mile long rural project that includes pavement resurfacing, profile corrections, drainage improvements, and turn lane additions on Hwy 70 from just east of Hwy 361 to the Minnesota/Wisconsin border.

### Recent Changes and Updates

This project was substantially completed in the fall of 2015.

### Project History

This project was let in January 2015 and is nearly complete.

Currently, the pavement condition on this section of Hwy 70 is poor, based on the 2012 District 1 Remaining Service Life map.

The scope of this project will be to establish a long term pavement fix for this section of Hwy 70, improve sight distance and safety at identified spot locations, and improve drainage conditions.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2011

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 6.7	\$ 8.7
Other Construction Elements:	\$ 0.4	\$ 0.6
Engineering:	\$ 1.4	\$ 1.5
Right of Way:	\$ 0.4	\$ 2.2
<b>Total:</b>	<b>\$ 8.9</b>	<b>\$ 13.0</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

The project is substantially complete. The current estimate was based off the actual cost from SWIFT fall 2017. The cost increase is due to the need to resurface the roadway using a stabilized bituminous reclamation and to reconstruct additional portions of the roadway. Second year of substantially complete costs are verified.

### Project Risks

The project is complete. There are no remaining risks.

### Schedule

Environmental Approval Date: 10/15/2014  
Municipal Consent Approval Date: Not Needed  
Geometric Layout Approval Date: 9/09/2014  
Construction Limits Established Date: 11/20/2013  
Original Letting Date: 01/23/2015  
Current Letting Date: 01/30/2015  
Construction Season: 2015  
Estimated Substantial Completion: Fall 2015



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District 1  
1123 Mesaba Ave  
(218) 725-2700

**District Engineer:** Duane Hill  
**Project Manager:** Derek Fredrickson  
**Revised Date:** 12/15/2016

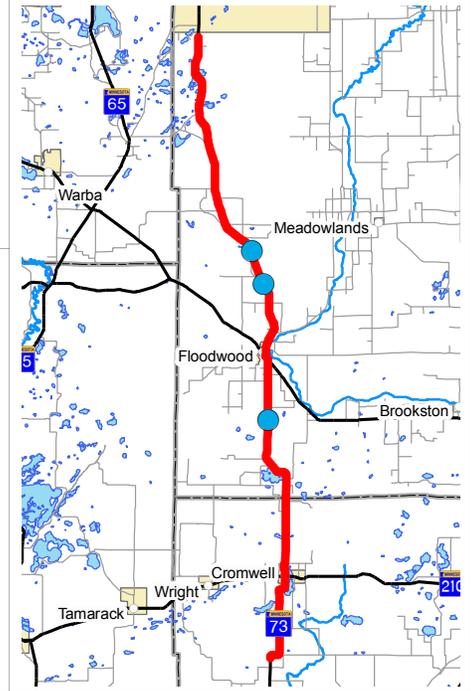
# PROJECT SUMMARY

Hwy 73

Various locations on Highway 73 and Highway 2 that include the City of Cromwell and the City of Floodwood

Bridge NA

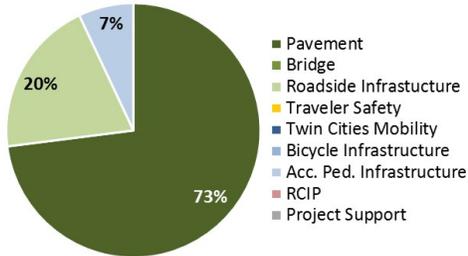
State Project No. 6928-28



## Primary Purpose

Performance-based Need: Pavement Condition

## Investment Category



## Project Description

This project is 30 miles long, at several locations along Highway 73 and Highway 2 including the City of Cromwell and the City of Floodwood.

Project improvements include: pavement resurfacing, curb ramp construction and sidewalk improvements.

## Recent Changes and Updates

The project is under design including development including the narrowing the roadway section and eliminating on-street parking on the north half of Highway 73 in the City of Floodwood. Coordination with the City of Floodwood and public outreach continues as part of project development. Temporary property easements will be required from many residents in Floodwood as a result of sidewalk replacement. The easement acquisition process has started.

Letting Date changed from June 2018 to July 2018 to balance state project letting dates.

## Project History

District 1 staff coordinated with the City of Floodwood to determine Floodwood Utility upgrades needed that will be completed in conjunction with the MnDOT Project.

The letting date changed from FY 2018 to FY 2019 as a result of overall program needs.

The project scoping was completed in August 2015.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2014

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 8.5	\$ 9.7
Other Construction Elements:	\$ 0.8	\$ 0.9
Engineering:	\$ 1.6	\$ 2.0
Right of Way:	\$ 0.0	\$ 0.1
<b>Total:</b>	<b>\$ 10.9</b>	<b>\$ 11.0</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

The baseline estimate was prepared in January 2014 before the final scoping report was completed. The current estimate was prepared in April 2016 and includes costs for pavement resurfacing and drainage improvements.

## Project Risks

The section of TH 73 south of Cromwell is located on a section where MnDOT does not have designated Highway Right of Way/Easement. The lack of ROW/Easement and the length of time to acquire could result in a project schedule delay or removal of this segment from the project.

## Schedule

Environmental Approval Date: pending approval  
 Municipal Consent Approval Date: Not Needed  
 Geometric Layout Approval Date: Not Needed  
 Construction Limits Established Date: Pending Approval  
 Original Letting Date: 01/01/2018  
 Current Letting Date: 7/27/2018  
 Construction Season: SUMMER 2018  
 Estimated Substantial Completion: 6/15 /2019



Minnesota Department of Transportation  
 District 1  
 1123 Mesaba Ave  
 (218) 725-2700

**District Engineer:** Duane Hill  
**Project Manager:** Michael Kalnbach

**Revised Date:** 12/15/2016

# PROJECT SUMMARY

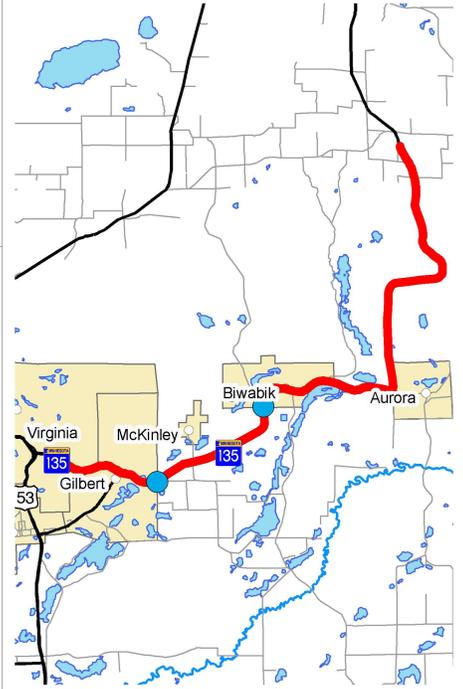
Hwy 135

From Hwy 53 to just south of County Road 558

Bridge 69023, 69025, 6942

State Project No. 6912-77

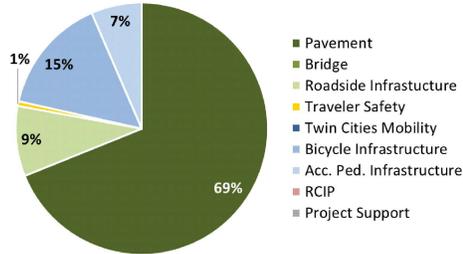
NA



## Primary Purpose

Performance-based Need: Pavement Condition

## Investment Category



## Project Description

This is a pavement resurfacing project on Hwy 135 from the junction of Hwy 53 to south of CR 558. It includes the cities of Gilbert and Biwabik. The work in Biwabik includes ADA improvements and new curb and gutter. The city of Biwabik plans to replace water and sewer lines under a cooperative agreement. There is minor work on 3 bridges and drainage repair throughout the project. Intersection revisions will be done at the intersection of CR 100.

## Recent Changes and Updates

Because of the scope of work in Biwabik, a separate project was programmed under S.P. 6912-79. This was done in the event funding or project delivery problems arose during development of the project that would require delaying the portion in Biwabik.

A task force of Biwabik residents was created to help define the future vision of Hwy. 135 through town. A "complete streets" approach is being used.

## Project History

The need for this project is driven by deteriorating pavement resulting in a rough ride, high maintenance costs, and reduced load carrying capacity.

The majority of the project area was last resurfaced in 2001. The 2015 pavement condition rating indicates the Ride Quality Index is Fair.

Hwy 135 in this area has numerous turn lanes and bypass lanes. The Mesabi Trail parallels and crosses portions of the route.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2015

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 8.9	\$ 10.1
Other Construction Elements:	\$ 0.8	\$ 0.9
Engineering:	\$ 1.7	\$ 1.9
Right of Way:	\$ 0.0	\$ 0.1
<b>Total:</b>	<b>\$ 11.4</b>	<b>\$ 13.0</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

The current cost estimate was prepared in February 2016. The project costs include pavement resurfacing and pedestrian infrastructure improvements in Biwabik. The cost increase is due to added bridge repair and intersection reconstruction in both Aurora and Gilbert.

## Project Risks

Municipal consent from Biwabik and Biwabik's level of funding under the Cooperative Construction Agreement.

Impact of replacement of city utilities in Biwabik

Risk of encountering contaminated soils in Biwabik could impact cost and schedule.

Need for additional Right of Way or Temporary Rights to Construct so that ADA improvements can be made in Biwabik could impact schedule.

## Schedule

Environmental Approval Date: pending approval  
 Municipal Consent Approval Date: Pending Approval  
 Geometric Layout Approval Date: Not Needed  
 Construction Limits Established Date: Pending Approval  
 Original Letting Date: 01/01/2019  
 Current Letting Date: 11/16/2018  
 Construction Season: 2019  
 Estimated Substantial Completion: Fall 2019



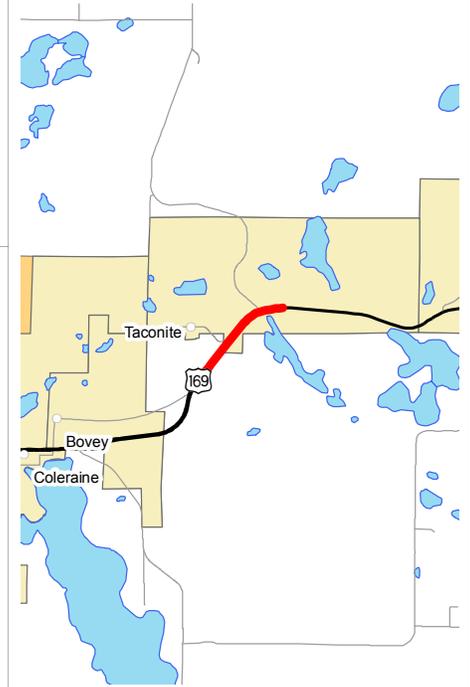
Minnesota Department of Transportation  
 District 1  
 1123 Mesaba Ave  
 (218) 725-2700

District Engineer: Duane Hill  
 Project Manager: Brian Larson

Revised Date: 12/15/2016

## PROJECT SUMMARY

Hwy 169  
 County Road 15 to County Road 7  
 Bridge 31X09  
 State Project No. 3116-142  
<http://www.dot.state.mn.us/d1/projects/hwy169-cross-range/>



### Primary Purpose

Regional & Community Improvement Priority

### Investment Category



### Project Description

This is a Corridors of Commerce project that is an expansion from two lanes to four lanes of Hwy 169 CR 7.

### Recent Changes and Updates

This project was let in June 2016 and construction started in September 2016. The construction is scheduled for completion in October 2017.

### Project History

This project was let in June 2016 and construction is scheduled to begin in September 2016.

The re-evaluation of the Environmental Assessment was completed in July 2015.

Phases of this expansion were completed beginning in 1994 and most recently in 2007. Funding for this project was secured in the fall of 2013 as part of the Corridor of Commerce program.

Project design began in late 2013 and is currently at the 60% design phase. The Environmental Document is being drafted.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2014

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 8.3	\$ 5.9
Other Construction Elements:	\$ 0.8	\$ 0.8
Engineering:	\$ 2.1	\$ 2.1
Right of Way:	\$ 0.5	\$ 0.5
<b>Total:</b>	<b>\$ 12.3</b>	<b>\$ 10.1</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

The base cost estimate was prepared in February 2014 and includes costs for constructing a four lane roadway with bituminous pavement and drainage facilities including a bridge/box culvert. The current estimate is the actual bid letting amount. The price decrease from the baseline estimate is due to lower than anticipated bituminous costs.

### Project Risks

The project has been let. Risks remaining include potential construction changes.

### Schedule

Environmental Approval Date: 07/16/2015  
 Municipal Consent Approval Date: Not Needed  
 Geometric Layout Approval Date: 10/23/2015  
 Construction Limits Established Date: 03/13/2015  
 Original Letting Date: 06/03/2016  
 Current Letting Date: 06/03/2016  
 Construction Season: 2016/2017  
 Estimated Substantial Completion: Summer 2017



Minnesota Department of Transportation  
 District 1  
 1123 Mesaba Ave  
 (218) 725-2700

**District Engineer:** Duane Hill  
**Project Manager:** Michael Kalnbach

**Revised Date:** 12/15/2016

# PROJECT SUMMARY

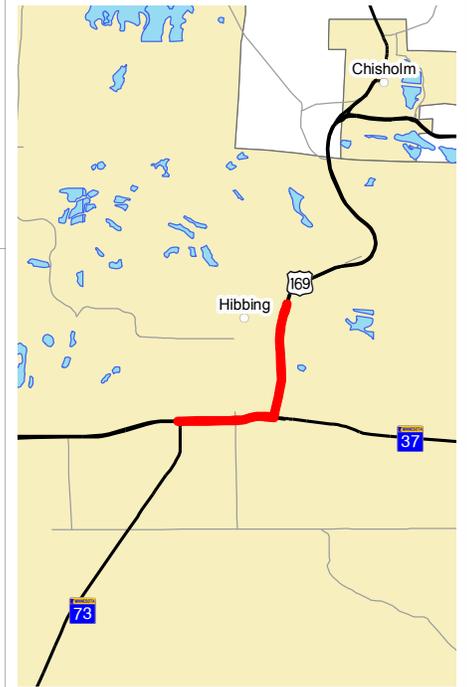
Hwy 169

In Hibbing, from the intersection of Hwy 73 to east of County Road 5.

Bridge NA

State Project No. 6934-116

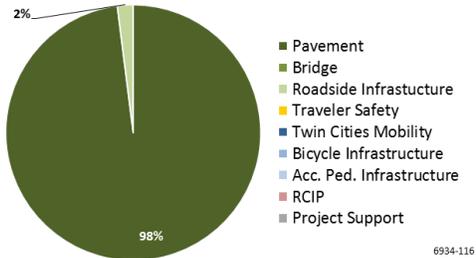
<http://www.dot.state.mn.us/d1/projects/hwy169-hibbing/>



## Primary Purpose

Performance-based Need: Pavement Condition

## Investment Category



## Project Description

The project consists of bituminous resurfacing, drainage and ADA improvements in Hibbing along 8 miles of Hwy 169 from the south junction of Hwy 73 to CR 5.

## Recent Changes and Updates

Construction began in July 2017 and is scheduled to be completed in October 2017.

## Project History

The project was programmed for construction in 2017 as part of the Statewide Managed Program to improve pavement condition on the National Highway System.

The need for this project is driven by deteriorating pavement resulting in a rough ride, high maintenance costs, and reduced load carrying capacity.

The majority of the project area was last resurfaced in 2000. The 2015 pavement condition rating indicates the Ride Quality Index is Fair.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2013

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 4.4	\$ 2.9
Other Construction Elements:	\$ 0.4	\$ 0.5
Engineering:	\$ 0.8	\$ 1.0
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 5.6</b>	<b>\$ 4.4</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

The baseline estimate was prepared in June 2014. Work on some additional roadway segments within the project limits were added to the project. The current estimate is based on the actual bid letting amount, and includes costs for pavement resurfacing and drainage improvements. The decreased estimate amount is due to lower than anticipated bituminous prices.

## Project Risks

A minor risk exists with the possibility of encountering contaminated soils.

## Schedule

Environmental Approval Date: 1-18-17  
 Municipal Consent Approval Date: Not Needed  
 Geometric Layout Approval Date: Not Needed  
 Construction Limits Established Date: 04/28/2016  
 Original Letting Date: 05/19/2017  
 Current Letting Date: 03/24/2017  
 Construction Season: 2017  
 Estimated Substantial Completion: Fall 2017



Minnesota Department of Transportation  
 District 1  
 1123 Mesaba Ave  
 (218) 725-2700

**District Engineer:** Duane Hill  
**Project Manager:** Brian Larson

**Revised Date:** 12/15/2016

# PROJECT SUMMARY

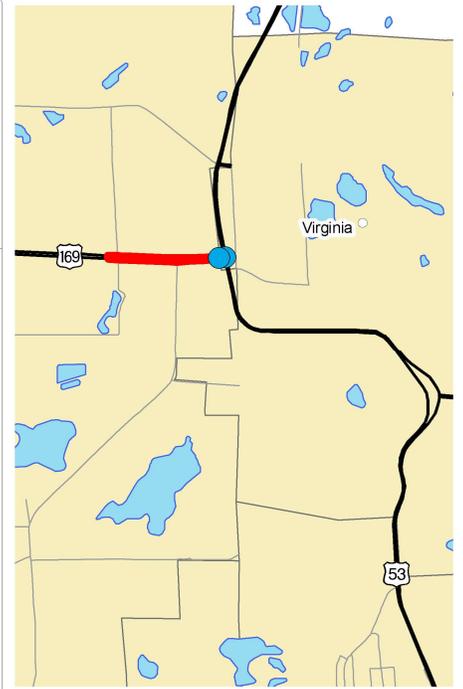
Hwy 169

Hwy 169 In Virginia from County Road 109 to Hoover Rd

Bridge 69034, &, 69035

State Project No. 6935-89

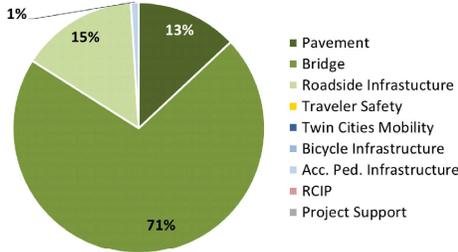
NA



## Primary Purpose

Performance-based Need: Pavement Condition and Bridge Condition

## Investment Category



## Project Description

The project is one mile long on Hwy 169 from just west of CR 109 to Hoover Rd in Virginia. The work includes pavement resurfacing, turn lanes, bridge rehabilitation, and traffic signal, drainage, and sidewalk improvements.

## Recent Changes and Updates

This project was let in June 2017. Construction is ongoing. Due to the traffic staging and construction schedule, the construction will take two construction seasons.

## Project History

The project scoping was originally completed in January 2014. The scoping document is currently being amended to include some traffic and safety improvements along the corridor in coordination with the City of Mountain Iron and St. Louis County.

The pavement recommendations for the divided highway section was changed from a bituminous overlay to a Concrete Pavement Repair project.

The need for this project is deteriorating pavement resulting in a rough ride, high maintenance costs, and reduced load carrying capacity.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2014

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 3.6	\$ 8.8
Other Construction Elements:	\$ 0.8	\$ 0.5
Engineering:	\$ 0.8	\$ 1.3
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 5.2</b>	<b>\$ 10.6</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

The current estimate is based on actual construction letting bid amounts. The estimate includes costs for pavement resurfacing, bridge rehabilitation and signal construction. The cost has increased due to the need to achieve bridge clearance over U.S. 53, an added signal system revision and additional concrete pavement repair.

## Project Risks

Project risks include potential construction changes and traffic handling during bridge construction activities.

## Schedule

Environmental Approval Date: 03/30/2017  
 Municipal Consent Approval Date: Not needed  
 Geometric Layout Approval Date: 8/11/2016  
 Construction Limits Established Date: 8/11/2016  
 Original Letting Date: 05/19/2017  
 Current Letting Date: 06/9/2017  
 Construction Season: July 2017 - November 2018  
 Estimated Substantial Completion: Fall 2018



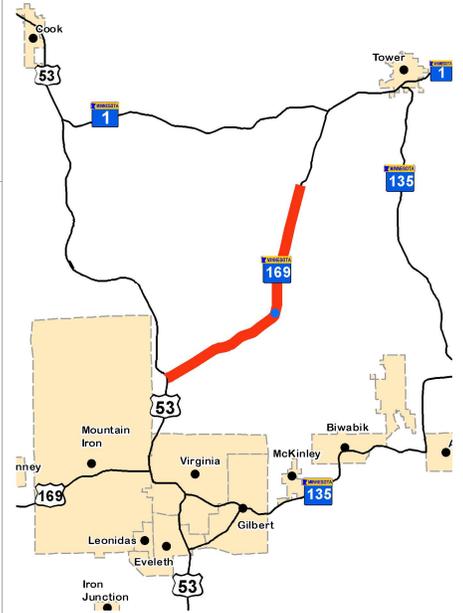
Minnesota Department of Transportation  
 District 1  
 1123 Mesaba Ave  
 (218) 725-2700

District Engineer: Duane Hill  
 Project Manager: Derek Fredrickson

Revised Date: 12/15/2016

# PROJECT SUMMARY

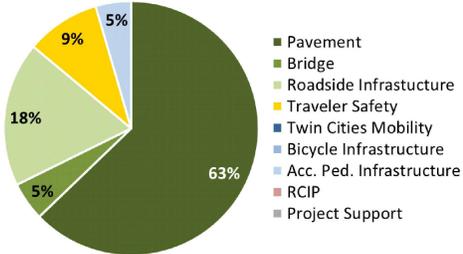
Hwy 169  
 Hwy 53 to County Hwy 26  
 Bridge 69088  
 State Project No. 6936-19  
 NA



## Primary Purpose

Performance-based need: Pavement Condition

## Investment Category



## Project Description

Project length is 13.044 miles. The project includes bituminous pavement resurfacing, culvert replacements and removing trees from the highway clear zone. Rehabilitation work on Bridge 69088 over the Sandy River will also be included.

## Recent Changes and Updates

Approximately 0.84 miles was added to the west end of this project in order to maintain a consistent pavement section through the corridor.

## Project History

The need for this project is driven by deteriorating pavement resulting in a rough ride, high maintenance costs, and reduced load carrying capacity.

The majority of the project area was last resurfaced in the late to mid 1990s. The 2015 pavement condition rating indicates the Ride Quality Index is Fair.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 7/1/16

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 5.5	\$ 5.5
Other Construction Elements:	\$ 0.5	\$ 0.5
Engineering:	\$ 1.1	\$ 1.1
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 7.1</b>	<b>\$ 7.1</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

The base and current cost estimate were prepared in February 2016. The estimate includes costs for pavement resurfacing culvert work, tree removal, and bridge rehabilitation.

## Project Risks

The final pavement repair fix could change from when this project was programmed.

## Schedule

Environmental Approval Date: Pending Approval  
 Municipal Consent Approval Date: Not Needed  
 Geometric Layout Approval Date: Not Needed  
 Construction Limits Established Date: Pending Approval  
 Original Letting Date: 10/25/19  
 Current Letting Date: 10/25/2019  
 Construction Season: SPRING 2020 - FALL 2020  
 Estimated Substantial Completion: FALL 2020



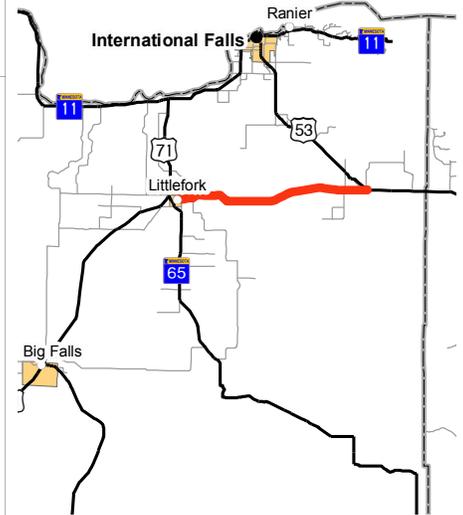
Minnesota Department of Transportation  
 District 1  
 1123 Mesaba Ave  
 (218) 725-2700

District Engineer: Duane Hill  
 Project Manager: Doug Kerfeld

Revised Date: 12/15/2016

# PROJECT SUMMARY

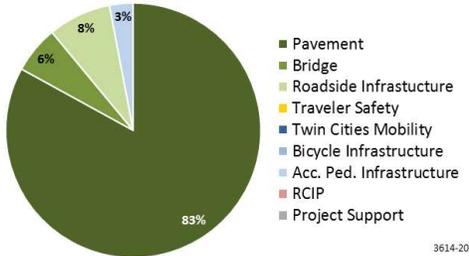
Hwy 217  
 Little Fork to Hwy 53  
 Bridge 9028A  
 State Project No. 3614-20  
 NA  
**Substantially Complete**



## Primary Purpose

Performance-based Need: Pavement condition

## Investment Category



3614-20

## Project Description

The project is 17 miles long and includes bituminous pavement rehabilitation on Hwy 217 from the east limit of Little Fork to Hwy 53. The city of Little Fork will be replacing its water line along Hwy 217 within the project limits. Work on the bridge consists of repairing the superstructure.

## Recent Changes and Updates

Construction was completed October 2016.

## Project History

The city of Little Fork will install a new water line along Hwy 217 as part of the project. A cooperative construction agreement with the city will be needed for the work estimated at \$185,500.

This is a pavement rehabilitation project slated for the 2016 fiscal year. It has been scoped for development along the eastern edge of Little Fork to the junction of Hwy 53.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2012

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 9.0	\$ 4.8
Other Construction Elements:	\$ 0.5	\$ 0.2
Engineering:	\$ 1.9	\$ 1.0
Right of Way:	\$ 0.2	\$ 0.3
<b>Total:</b>	<b>\$ 11.6</b>	<b>\$ 6.3</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

The project was let in January 2016. The scope of the pavement repair has changed, after the base estimate resulting in a lower cost. Much of the project work will now consist of a thinner pavement surface. The current estimate was based off of actual cost from SWIFT fall 2017. First year of substantially complete costs are verified.

## Project Risks

Bituminous paving on the project had not yet been completed when this report was being prepared. No problems are anticipated with the paving.

## Schedule

Environmental Approval Date: 12/16/2015  
 Municipal Consent Approval Date: Not Needed  
 Geometric Layout Approval Date: Not Needed  
 Construction Limits Established Date: Not Needed  
 Original Letting Date: 05/15/2009  
 Current Letting Date: 01/29/2016  
 Construction Season: 2016  
 Estimated Substantial Completion: Fall 2016



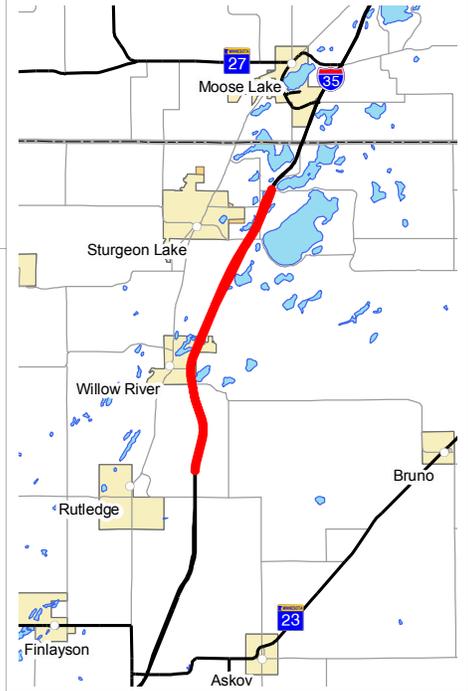
Minnesota Department of Transportation  
 District 1  
 1123 Mesaba Ave  
 (218) 725-2700

**District Engineer:** Duane Hill  
**Project Manager:** Brian Larson

**Revised Date:** 12/15/2016

# PROJECT SUMMARY

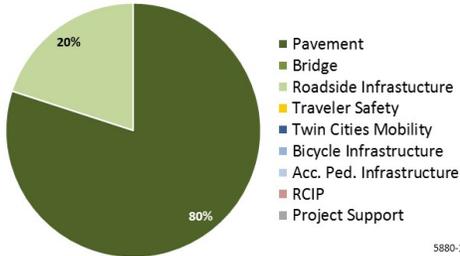
I-35  
 North of Pine County Rd 33 to south of the Carlton County line  
 Bridge NA  
 State Project No. 5880-180  
 NA



## Primary Purpose

Performance-based Need: Pavement Condition

## Investment Category



5880-180

## Project Description

The project consists of a bituminous reclamation for 9 miles of I-35 from just north of Pine CR 33 to south of the Carlton county line in the Sturgeon Lake/Willow River area.

## Recent Changes and Updates

Project was completed in August 2017.

## Project History

This project was initially programmed for bituminous resurfacing on the northbound roadway and changed to a bonded concrete overlay. The southbound section of I-35 is in fair condition, and the northbound section is in poor condition.

The project was programmed for construction in 2017 as part of the statewide managed program to improve pavement condition on the National Highway System.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2013

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 5.0	\$ 11.8
Other Construction Elements:	\$ 0.5	\$ 1.0
Engineering:	\$ 1.0	\$ 2.6
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 6.5</b>	<b>\$ 15.4</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

This job was let in December 2016. The current cost estimate is based on actual bid results. The estimate includes costs for bituminous reclamation, and drainage repair. The cost increase from the base estimate is due to the addition of the southbound lane into the project.

## Project Risks

There are currently no outstanding risks on this project.

## Schedule

Environmental Approval Date: 10-10-16  
 Municipal Consent Approval Date: Not Needed  
 Geometric Layout Approval Date: Not Needed  
 Construction Limits Established Date: 05/27/2016  
 Original Letting Date: 01/01/2012  
 Current Letting Date: 12/16/2016  
 Construction Season: 2017  
 Estimated Substantial Completion: Fall 2017



Minnesota Department of Transportation  
 District 1  
 1123 Mesaba Ave  
 (218) 725-2700

**District Engineer:** Duane Hill  
**Project Manager:** Roberta Dwyer

**Revised Date:** 12/15/2016

## PROJECT SUMMARY

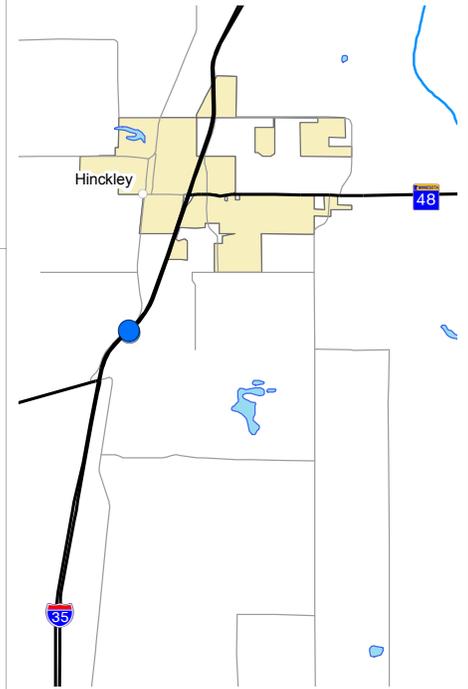
I-35

Replace two bridges on I-35 over the BNSF railroad south of Hwy 48

Bridge 9784, 9783

State Project No. 5880-186

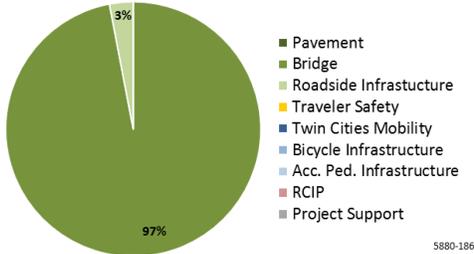
Substantially Complete



### Primary Purpose

Performance-based Need: Bridge condition

### Investment Category



### Project Description

The project is located on I-35, south of Hwy 48 at Hinckley and includes the replacement of Bridges 9783 and 9784 over the Burlington Northern Santa Fe railroad and associated approach work.

### Recent Changes and Updates

Project was substantially completed in October 2016.

### Project History

This project is tied to S.P. 5880-191, a concrete pavement project. Construction is underway with substantial completion in October 2016.

These bridges were originally constructed over the BNSF railroad with the I-35 construction in 1959. The bridge decks of both bridges are structurally deficient and in need of replacement. It is questionable whether the rest of the structure for both bridges should be repaired or replaced, or possibly widened to better match the width of the roadways. The project is under construction April-October 2016.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2013

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 5.7	\$ 3.1
Other Construction Elements:	\$ 0.4	\$ 0.2
Engineering:	\$ 1.1	\$ 0.5
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 7.2</b>	<b>\$ 3.8</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

The initial cost estimate was prepared in February 2014. The baseline estimate includes costs for bridge replacement, and approach grading. The current estimate was based off of actual cost from SWIFT fall 2017. The cost decrease was due to the grading portion of this job being moved to S.P. 5880-191. First year of substantially complete costs are verified.

### Project Risks

The project is complete. There are no remaining risks.

### Schedule

Environmental Approval Date: 06/18/2015  
 Municipal Consent Approval Date: Not Needed  
 Geometric Layout Approval Date: July 29, 2015  
 Construction Limits Established Date: July 29, 2015  
 Original Letting Date: 01/01/2016  
 Current Letting Date: 01/29/2016  
 Construction Season: 2016  
 Estimated Substantial Completion: Fall 2016



Minnesota Department of Transportation  
 District 1  
 1123 Mesaba Ave  
 (218) 725-2700

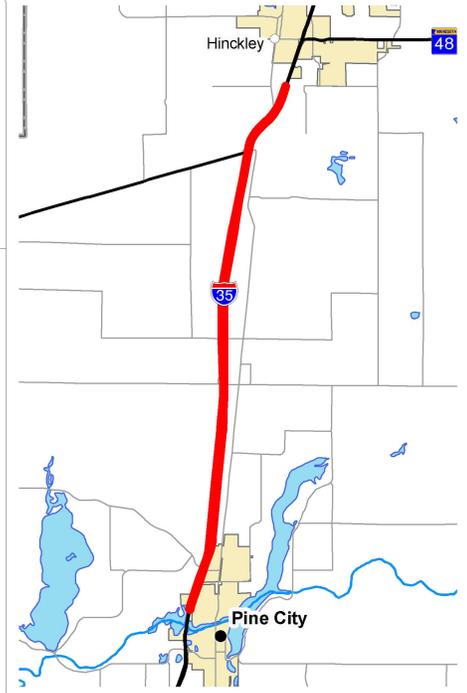
**District Engineer:** Duane Hill  
**Project Manager:** Roberta Dwyer

**Revised Date:** 12/15/2016

# PROJECT SUMMARY

I-35  
 South of County Road 11 to 1 mile south of Hinckley  
 Bridge NA  
 State Project No. 5880-191

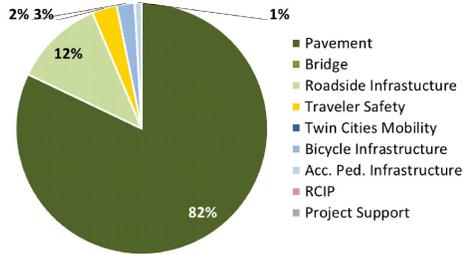
**Substantially Complete**



## Primary Purpose

Performance-based Need: Pavement condition

## Investment Category



## Project Description

Project length is 11.6 miles. This project consists of a concrete overlay on I-35 from the Snake River at Pine City to south of Highway 48 at Hinckley.

## Recent Changes and Updates

Project was substantially completion in October 2016.

## Project History

This segment of I-35 was constructed with concrete in 1961. The concrete underwent major repairs and in 2006, a bituminous overlay was placed over the concrete.

The bituminous overlay is failing at the joints resulting in a rough ride and a safety hazard. Current maintenance costs for patching exceed \$500,000 per year.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2015

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 24.6	\$ 21.7
Other Construction Elements:	\$ 2.6	\$ 0.9
Engineering:	\$ 5.3	\$ 2.1
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 32.5</b>	<b>\$ 24.7</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

The base cost estimate was prepared in March 2015 and includes costs for concrete pavement resurfacing. The project was let in January 2016. The current estimate was based off of actual cost from SWIFT fall 2017. A decrease in the required pavement thickness resulted in a lower cost for the current estimate. First year of substantially complete costs are verified.

## Project Risks

The project is complete. There are no remaining risks.

## Schedule

Environmental Approval Date: 12/22/2015  
 Municipal Consent Approval Date: Not required  
 Geometric Layout Approval Date: Not required  
 Construction Limits Established Date: 08/13/2015  
 Original Letting Date: 01/29/2016  
 Current Letting Date: 01/29/2016  
 Construction Season: 2016  
 Estimated Substantial Completion: Fall 2016



Minnesota Department of Transportation  
 District 1  
 1123 Mesaba Ave  
 (218) 725-2700

District Engineer: Duane Hill  
 Project Manager: Roberta Dwyer

Revised Date: 12/15/2016

# PROJECT SUMMARY

I-535

On the I-535 Blatnik Bridge over the St. Louis River between Duluth, MN and Superior, WI.

Bridge 9030

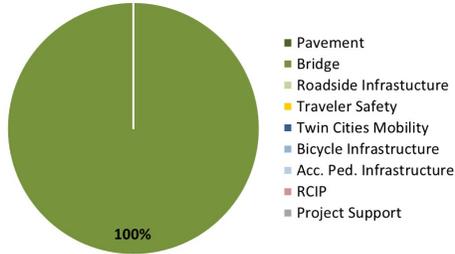
State Project No. 6981-9030L



## Primary Purpose

Performance-based Need: Bridge condition.

## Investment Category



## Project Description

The Blatnik Bridge on I-535 between Duluth, MN and Superior, WI will have some of its steel structural members repainted along with minor concrete repairs to the superstructure.

## Recent Changes and Updates

No changes.

## Project History

This bridge rehabilitation project is scheduled for construction years 2019 and 2020.

The project was moved to FY 2020 for Wisconsin DOT funding/programming purposes.

The Blatnik Bridge was originally built in 1961, and previous bridge work included: major renovation and remodeling work such as widening of the main truss in 1993, painting, concrete barrier replacement, joint replacements and lighting in 2012.

The need for the project is driven by a deteriorating paint system, which if left unchecked would expose the steel bridge to accelerated corrosion. The bridge is fracture critical. This project will paint areas that were not painted in the 2012 project.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2015

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 8.6	\$ 9.1
Other Construction Elements:	\$ 0.3	\$ 0.3
Engineering:	\$ 1.7	\$ 1.7
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 10.6</b>	<b>\$ 11.1</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

The base cost estimate was prepared in April 2015 prior to scoping. The estimate included costs for bridge painting. The current estimate was prepared in February 2016 after scoping was complete. 50% of the project cost will be paid for by WisDOT. The current estimate includes both the Wisconsin and Minnesota project cost.

## Project Risks

Project will require cost sharing with the state of Wisconsin and their funding may not be available until 2020 or later.

The Bridge Management Plan being developed will result in a change to Scope or Schedule of this project.

Fracture critical bridge inspections done prior to this project identify additional work that needs to be done to keep the bridge servicable.

## Schedule

Environmental Approval Date: pending approval  
 Municipal Consent Approval Date: Not Needed  
 Geometric Layout Approval Date: Not Needed  
 Construction Limits Established Date: Not Needed  
 Original Letting Date: 01/01/2019  
 Current Letting Date: 12/20/2019  
 Construction Season: 2020  
 Estimated Substantial Completion: Fall of 2020



Minnesota Department of Transportation  
 District 1  
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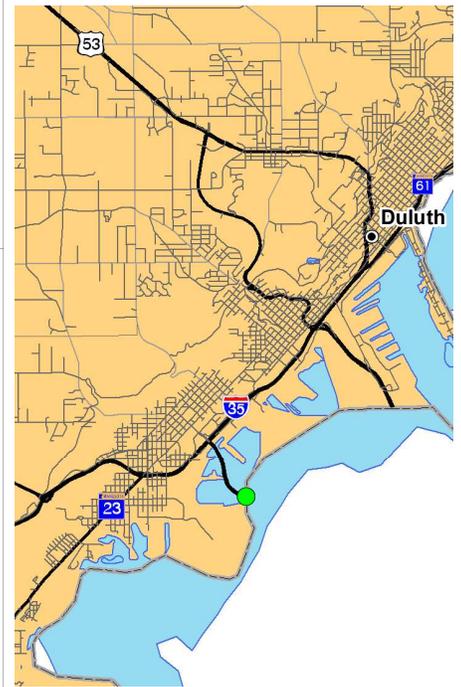
**District Engineer:** Duane Hill  
**Project Manager:** Brian Larson

**Revised Date:** 12/15/2016

# PROJECT SUMMARY

Hwy 2  
 Bong Bridge over Saint Louis River  
 Bridge 69100  
 State Project No. 6937-69100D

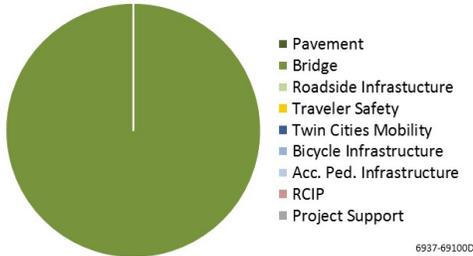
NA  
**Substantially Complete**



## Primary Purpose

Performance-based Need: Bridge Condition

## Investment Category



## Project Description

The project is for the rehabilitation of Bridge 69100, which carries Hwy 2 over the St. Louis River. This is a joint project of the Minnesota and Wisconsin departments of transportation. The work includes bridge deck replacement, joint replacement, spot concrete repairs, support cable work and painting.

## Recent Changes and Updates

This project was substantially completed in fall 2015.

## Project History

The Wisconsin Department of Transportation is the lead agency on this project. This project was let in January 2014. The Minnesota bound work was completed in fall 2014 and the Wisconsin bound work is currently under construction.

The Hwy 2 Bong Bridge over the St. Louis River between Duluth and Superior was built in 1982. This is a fracture critical bridge.

The proposed rehabilitation work will extend the useful service life of this bridge and decrease the amount of future maintenance needed to keep it operational.

Work planned for Bridges 69101, 69102 and 69109 was removed from this project.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2010

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 23.2	\$ 7.5
Other Construction Elements:	\$ 1.0	\$ 0.2
Engineering:	\$ 4.7	\$ 0.5
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 28.9</b>	<b>\$ 8.2</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

The baseline cost includes the cost of both WisDOT's and MnDOT's share. The project was let in January 2014. The current estimate was based off the actual cost from SWIFT fall 2017. This includes only MnDOT's share of the costs for bridge.

## Project Risks

The project is complete. There are no remaining risks.

## Schedule

Environmental Approval Date: 06/26/2012  
 Municipal Consent Approval Date: Not Needed  
 Geometric Layout Approval Date: Not Needed  
 Construction Limits Established Date: Not Needed  
 Original Letting Date: 02/28/2004  
 Current Letting Date: 01/14/2014  
 Construction Season: 2014 & 2015  
 Estimated Substantial Completion: Fall 2015

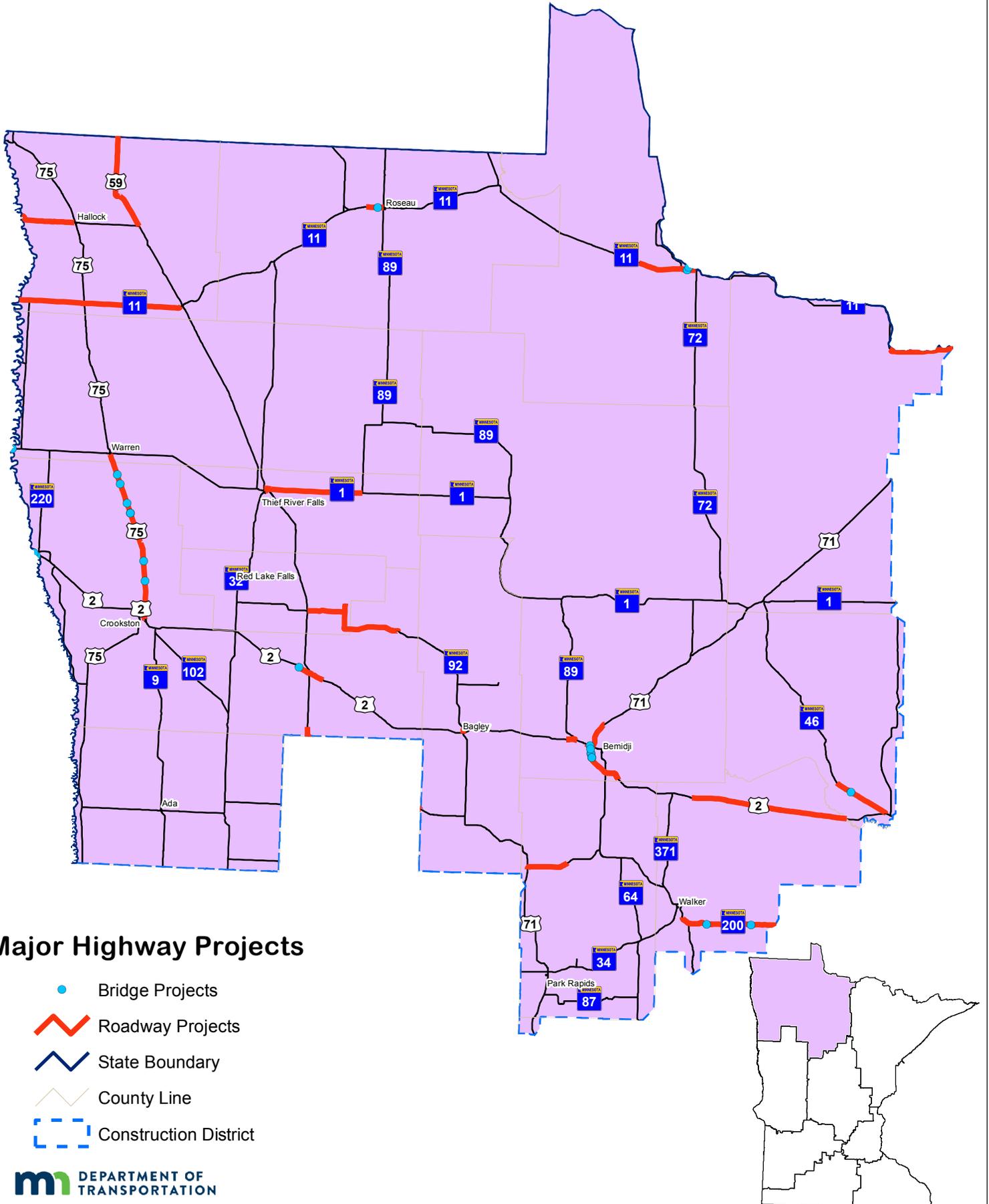


Minnesota Department of Transportation  
 District 1  
 1123 Mesaba Ave  
 (218) 725-2700

**District Engineer:** Duane Hill  
**Project Manager:** Derek Fredrickson  
**Revised Date:** 12/15/2016

# Major Highway Projects 2017

## D2-BEMIDJI



### Major Highway Projects

- Bridge Projects
- Roadway Projects
- State Boundary
- County Line
- Construction District

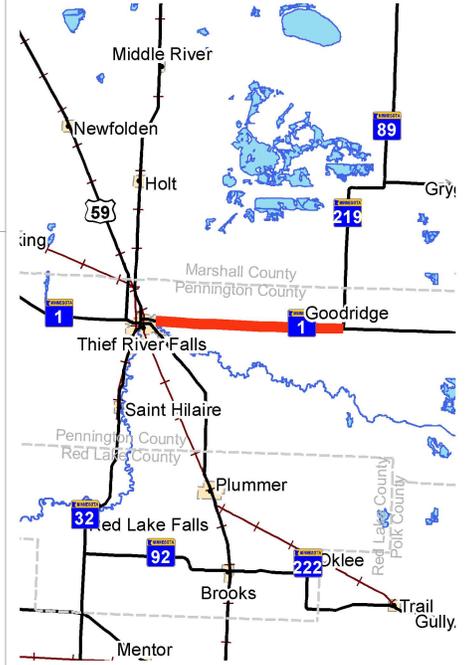
## District Project Summary

### District 2

Route	State Project #	Project Location	Page
Hwy 1	5702-47	From Thief River Falls to MN 219	B 2
Hwy 92	1507-66	In Bagley	B 3
Hwy 2	6001-61	From East Grand Forks to Fisher, Westbound	B 4
Hwy 2	6018-02	Kennedy Bridge over the Red River in East Grand Forks	B 5
Hwy 2	0406-59	Intersection of Hwy 2 & Hwy 89 west of Bemidji	B 6
Hwy 2	1102-62	From Cass Lake to Ball Club	B 7
Hwy 2	0406-60	Bemidji Bypass	B 8
Hwy 2	6004-24	In Erskine	B 9
Hwy 2B	6015-07	Over the Red River in East Grand Forks	B 10
Hwy 11	6802-27	From CSAH 15 to Roseau	B 11
Hwy 11	3901-41	Over 7 miles west of Baudette on Hwy 11 to Baudette	B 12
Hwy 46	3109-41M	From Hwy 2 to Itasca Hwy 39	B 13
Hwy 59	3505-19	From Hwy 175 to the Canadian border	B 14
Hwy 71	2906-18	From south of Hwy 200 to southern limits of Lake George	B 15
Hwy 71	0410-50	From Hwy 197 to 5 miles North of Bemidji	B 16
Hwy 72	3905-09	In Baudette over the Rainy River	B 17
Hwy 75	6011-24	From north of Hwy 2 to south of Hwy 1 in Warren	B 18
Hwy 75	6011-29	From Hwy 2 to Polk Hwy 19	B 19
Hwy 92	6305-18	From Hwy 59 to Trail	B 20
Hwy 175	3515-16	North Dakota Border to Hallock	B 21
Hwy 200	1106-15M	From Walker to Hwy 84	B 22
Hwy 2	6002-72	Slope protection in Crookston	B 23
Hwy 11	3604-73M	West of Loman to the junction of TH 71 at Pelland	B 24
Hwy 11	3501-14	From the Red River to the west end of Karlstad	B 25

# PROJECT SUMMARY

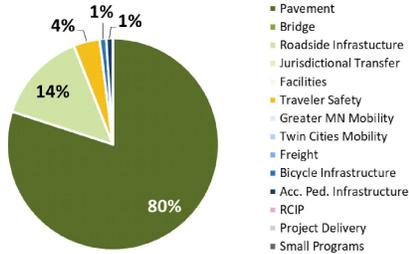
Hwy 1  
 From Thief River Falls to MN 219  
 Bridge NA  
 State Project No. 5702-47  
 NA



## Primary Purpose

Performance-based Need: Pavement

## Investment Category



## Project Description

The project consists of reclaiming 15.9 miles of pavement, replacing one centerline and 16 entrance culverts.

## Recent Changes and Updates

Project was scoped in March 2017.

## Project History

Pavement surface ride quality index on Hwy 1 is projected to drop below 2.5 by 2022. Centerline and entrance culverts have been identified to be in poor condition.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2017

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 6.4	\$ 6.4
Other Construction Elements:	\$ 0.3	\$ 0.3
Engineering:	\$ 0.0	\$ 0.0
Right of Way:	\$ 1.1	\$ 1.1
<b>Total:</b>	<b>\$ 7.8</b>	<b>\$ 7.8</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

The Baseline Estimate was developed based on 2015 historical cost data and uses an inflation factor tied to the midpoint of the 2021 construction season.

## Project Risks

No risks at this time.

## Schedule

Environmental Approval Date: Pending Approval  
 Municipal Consent Approval Date: Not Needed  
 Geometric Layout Approval Date: Not Needed  
 Construction Limits Established Date: Pending Approval  
 Original Letting Date: 03/27/2020  
 Current Letting Date: 03/27/2020  
 Construction Season: 2021  
 Estimated Substantial Completion: Nov. 2021



Minnesota Department of Transportation  
 District 2  
 3920 Highway 2 West  
 (218) 755-6500

District Engineer: Craig Collison  
 Project Manager: Stephen Frisco

Revised Date: 12/15/2017

# PROJECT SUMMARY

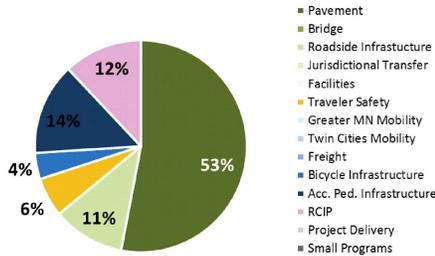
Hwy 92  
In Bagley  
Bridge NA  
State Project No. 1507-66  
NA



## Primary Purpose

Performance-based Need: Pavement

## Investment Category



## Project Description

The project consists of replacing 1.1 miles of pavement, replacing curb and gutter, replacing or repairing failing drainage infrastructure, replacing sidewalk and pedestrian ramps, constructing a multi-use path, replacing a traffic signal and lighting, and constructing a turn lane.

## Recent Changes and Updates

Reclamation of pavement was extended to the north limits of the project. It was also determined that additional storm sewer was in need of replacement and the limits of peat excavation was extended.

## Project History

The pavement ride quality index is projected to be below 2.0 by 2014. The storm sewer system is in poor condition and is below capacity. The existing sidewalks are not in compliance with the Americans with Disabilities Act of 1990. The corridor lacks pedestrian and bicycle facilities to Lomond Park and Bagley High School. Sanitary sewer and water main utilities (City of Bagley) are in poor condition. The existing lighting system lacks continuity.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2016

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 3.3	\$ 4.6
Other Construction Elements:	\$ 0.5	\$ 0.5
Engineering:	\$ 0.1	\$ 0.1
Right of Way:	\$ 0.6	\$ 0.6
<b>Total:</b>	<b>\$ 4.4</b>	<b>\$ 5.8</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

The Baseline Estimate was developed based on 2014 historical cost data and uses an inflation factor tied to the midpoint of the 2018 construction season. Inflation factor was updated in 2017, pavement reclaim was extended, and additional storm sewer resulted in an increase in the cost estimate.

## Project Risks

Local traffic and businesses may be disrupted by the length, complexity and urban setting of the project.

## Schedule

Environmental Approval Date: 06/07/2017  
Municipal Consent Approval Date: Not Needed  
Geometric Layout Approval Date: Not Needed  
Construction Limits Established Date: Not Needed  
Original Letting Date: 01/26/2018  
Current Letting Date: 01/26/2018  
Construction Season: 2018  
Estimated Substantial Completion: Nov. 2018



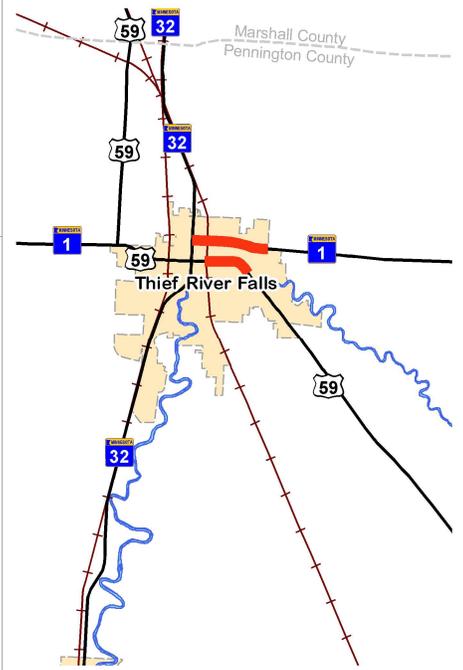
Minnesota Department of Transportation  
District 2  
3920 Highway 2 West  
(218) 755-6500

District Engineer: Craig Collison  
Project Manager: Jeremy Hadrava

Revised Date: 12/15/2017

# PROJECT SUMMARY

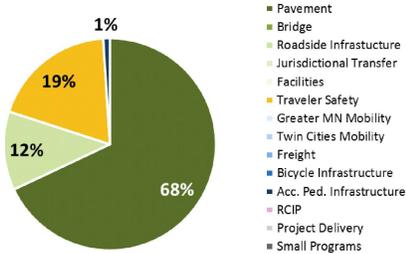
Hwy 2  
 From East Grand Forks to Fisher, Westbound  
 Bridge NA  
 State Project No. 6001-61  
 NA



## Primary Purpose

Performance-based Need: Pavement

## Investment Category



## Project Description

The project consists of concrete cracking and bituminous overlaying 15.1 miles of pavement, replacing or repairing failing drainage infrastructure, and constructing and extending turn lanes.

## Recent Changes and Updates

Project was scoped in May 2017.

## Project History

Pavement surface ride quality index on US 2 is projected to drop below 2.5 by 2020. Centerline culverts are identified to be in poor condition.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2017

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 10.8	\$ 10.8
Other Construction Elements:	\$ 0.5	\$ 0.5
Engineering:	\$ 0.0	\$ 0.0
Right of Way:	\$ 1.8	\$ 1.8
<b>Total:</b>	<b>\$ 13.1</b>	<b>\$ 13.1</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

The Baseline Estimate was developed based on 2015 historical cost data and uses an inflation factor tied to the midpoint of the 2021 construction season.

## Project Risks

American Crystal Sugar factory is adjacent to the project and experiences high truck traffic in the fall. There is currently a planning study at the intersection of US 2 and US 2B which may result in an intersection improvement included with this project.

## Schedule

Environmental Approval Date: Pending Approval  
 Municipal Consent Approval Date: Not Needed  
 Geometric Layout Approval Date: Not Needed  
 Construction Limits Established Date: Pending Approval  
 Original Letting Date: 2021  
 Current Letting Date: 2021  
 Construction Season: 2021  
 Estimated Substantial Completion: Nov. 2021



Minnesota Department of Transportation  
 District 2  
 3920 Highway 2 West  
 (218) 755-6500

District Engineer: Craig Collison  
 Project Manager: Joe McKinnon

Revised Date: 12/15/2017

# PROJECT SUMMARY

Hwy 2

Kennedy Bridge over the Red River in East Grand Forks

Bridge 9090

State Project No. 6018-02

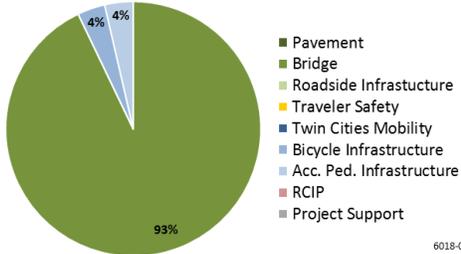
<http://www.dot.state.mn.us/d2/projects/kennedybridge/index.html>



## Primary Purpose

Performance-based Need: Bridge Condition

## Investment Category



6018-02

## Project Description

The project consists of rehabilitating the bridge over the Red River in East Grand Forks. The project includes replacing the bridge deck, repairing the tilted pier and painting.

## Recent Changes and Updates

Project was let and awarded to Zenith Tech, Inc. Currently under construction.

## Project History

A planning study was completed in early 2014, and determined that a bridge rehabilitation project is a feasible alternative to reconstruction. The rehabilitation will include replacing a severely tilted bridge pier, installing a new concrete bridge deck, adding new vehicle railings, painting and constructing a pedestrian/bicycle path on the north side of the deck.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2012

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 25.0	\$ 7.9
Other Construction Elements:	\$ 0.0	\$ 8.8
Engineering:	\$ 2.5	\$ 0.9
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 27.5</b>	<b>\$ 17.6</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

Other Construction Elements represents North Dakota's cost share. Cost savings can be attributed to the improvement alternative selected. The current estimate is the construction letting amount.

## Project Risks

Because several agencies are involved in the decision-making/approval process, there may be significant delays or changes or other construction assumptions. There may be problems coordinating project scheduling with emergency services and schools.

## Schedule

Environmental Approval Date: 09/09/2016  
 Municipal Consent Approval Date: Not Needed  
 Geometric Layout Approval Date: Not Needed  
 Construction Limits Established Date: Not Needed  
 Original Letting Date: 11/17/2017  
 Current Letting Date: 12/02/2016  
 Construction Season: 2017 & 2018  
 Estimated Substantial Completion: Nov. 2018



Minnesota Department of Transportation  
 District 2  
 3920 Highway 2 West  
 (218) 755-6500

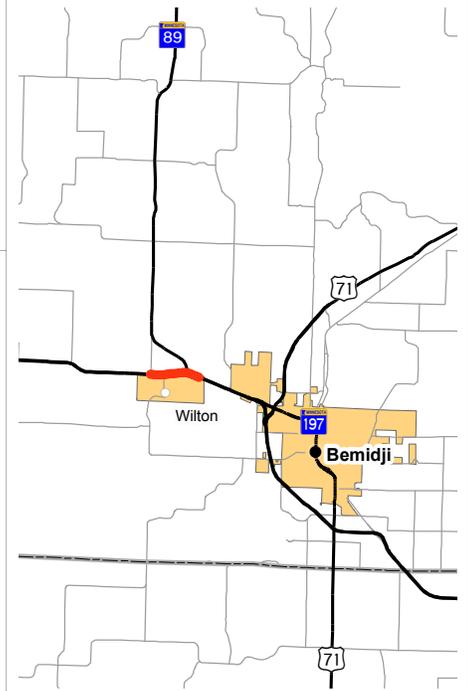
**District Engineer:** Craig Collison  
**Project Manager:** Joe McKinnon

**Revised Date:** 12/15/2016

## PROJECT SUMMARY

Hwy 2  
 Intersection of Hwy 2 & Hwy 89 west of Bemidji  
 Bridge 04030  
 State Project No. 0406-59

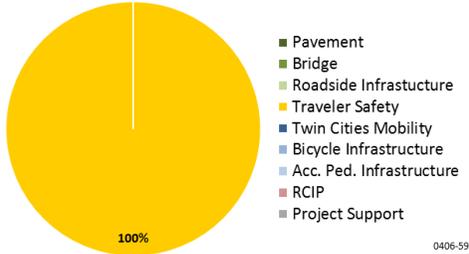
NA  
**Substantially Complete**



### Primary Purpose

Performance-based Need: District Safety Plan

### Investment Category



### Project Description

The project consists of constructing a partial interchange at the intersection of Hwy 2 and Hwy 89.

### Recent Changes and Updates

Project was substantially complete in October 2015.

### Project History

The project was let and awarded to KGM Contractors Inc.

This intersection has the third highest injury related crash rate in the state. An engineering study was completed in December 2012 and recommended a partial interchange to eliminate the most recurring intersecting vehicle movements.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2011

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 5.0	\$ 4.9
Other Construction Elements:	\$ 0.0	\$ 0.4
Engineering:	\$ 0.6	\$ 1.0
Right of Way:	\$ 0.6	\$ 1.2
<b>Total:</b>	<b>\$ 6.1</b>	<b>\$ 7.5</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

The Current Estimate is based on actual costs. Additional engineering costs were needed due to the added complexity of the project.

### Project Risks

No remaining risks

### Schedule

Environmental Approval Date: 01/27/2015  
 Municipal Consent Approval Date: Not Needed  
 Geometric Layout Approval Date: 07/16/2014  
 Construction Limits Established Date: 07/16/2014  
 Original Letting Date: 04/25/2015  
 Current Letting Date: 04/24/2015  
 Construction Season: 2015  
 Estimated Substantial Completion: Oct. 2015



Minnesota Department of Transportation  
 District 2  
 3920 Highway 2 West  
 (218) 755-6500

**District Engineer:** Craig Collison  
**Project Manager:** Brandy Pemberton  
**Revised Date:** 12/15/2016

## PROJECT SUMMARY

Hwy 2

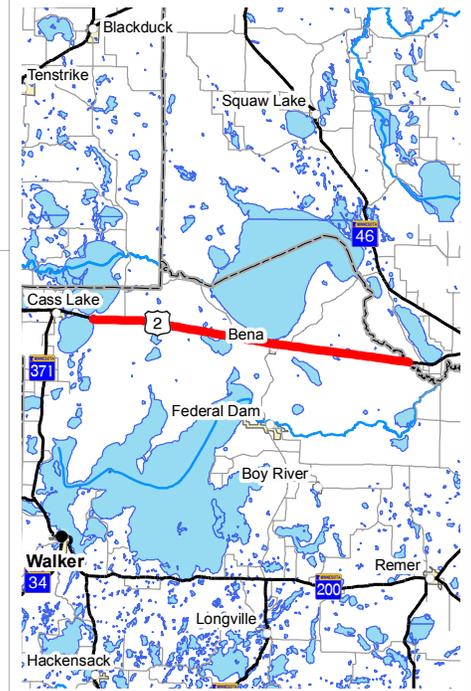
From Cass Lake to Ball Club

Bridge NA

State Project No. 1102-62

<http://www.dot.state.mn.us/d2/projects/hwy2/passinglanes/index.html>

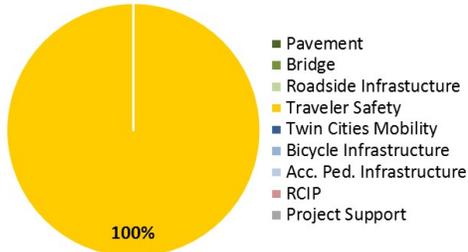
**Substantially Complete**



### Primary Purpose

Performance-based Need: Interregional Corridor Mobility

### Investment Category



### Project Description

The project consists of constructing three 4-lane passing sections, three left turn lanes, 9 right turn lanes and one bypass lane.

### Recent Changes and Updates

Project was substantially complete in October 2015.

### Project History

The project was let and awarded to Gladen Construction Inc.

Hwy 2 from Cass Lake to Deer River is the last remaining segment of Hwy 2 from North Dakota to Wisconsin without passing lanes or a 4-lane cross section. Long traffic queues are common. This results in a lower level of service and encourages aggressive driving habits. The proposed project would improve overall traffic operations by breaking up traffic platoons and would reduce delays caused by inadequate passing opportunities.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2014

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 10.5	\$ 13.3
Other Construction Elements:	\$ 0.4	\$ 0.9
Engineering:	\$ 2.1	\$ 1.5
Right of Way:	\$ 0.1	\$ 0.2
<b>Total:</b>	<b>\$ 13.1</b>	<b>\$ 15.9</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

The Current Estimate is based on actual costs. The increased cost is due to deep muck excavation, construction staging and additional grading work identified during construction.

### Project Risks

No remaining risks

### Schedule

Environmental Approval Date: 06/30/2014  
 Municipal Consent Approval Date: Not Needed  
 Geometric Layout Approval Date: 04/29/2014  
 Construction Limits Established Date: 04/29/2014  
 Original Letting Date: 07/25/2014  
 Current Letting Date: 08/22/2014  
 Construction Season: 2014/2015  
 Estimated Substantial Completion: Oct. 2015



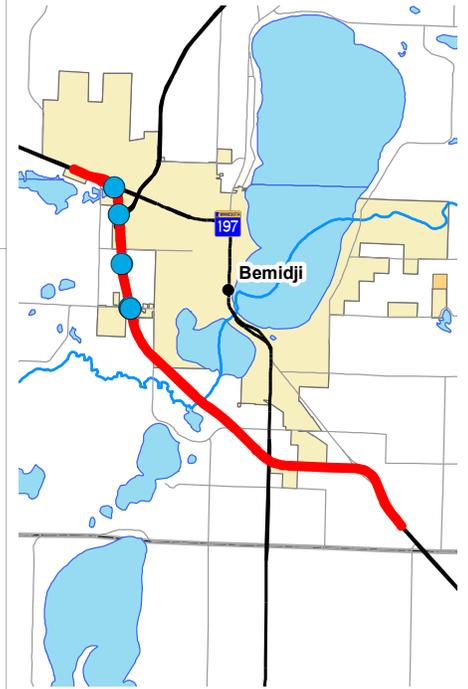
Minnesota Department of Transportation  
 District 2  
 3920 Highway 2 West  
 (218) 755-6500

**District Engineer:** Craig Collison  
**Project Manager:** Deb Bauer

**Revised Date:** 12/15/2016

# PROJECT SUMMARY

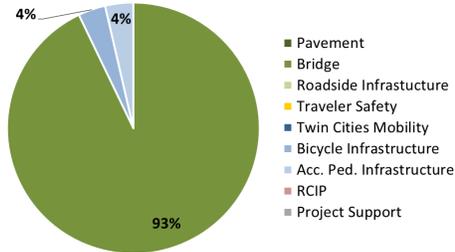
Hwy 2  
 Bemidji Bypass  
 Bridge 04005, -, 04010, 04019  
 State Project No. 0406-60  
<http://www.dot.state.mn.us/d2/projects/bemidji-hwy2and197/index.html>



## Primary Purpose

Performance-based Need: Pavement

## Investment Category



## Project Description

The project consists of resurfacing 21.5 miles of pavement, rehabilitating six bridges and increasing bridge clearance along the corridor.

## Recent Changes and Updates

Project was let and awarded to Knife River Materials. Currently under construction.

## Project History

MnDOT expanded the scope of a bridge rehabilitation project along the Bemidji bypass to include resurfacing 21.5 miles of pavement adjacent to the bridges. Combining these improvements provides cost savings along with constraining traffic impacts to one construction season. Accelerating the pavement resurfacing allows for a thinner, less costly resurfacing. Six of the bridges are over 30 years old and require rehabilitation to extend their useful lives. The bridge does not meet clearance requirements of a super-haul truck corridor. The pavement surface on US 2 is projected to be in poor condition by 2018. This project will extend the useful life of all six bridges, provide additional clearance under Bridge 04019 so it can be designated a super-haul truck corridor, and extend the useful service life of the pavement.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2013

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 3.3	\$ 5.4
Other Construction Elements:	\$ 0.2	\$ 0.3
Engineering:	\$ 0.6	\$ 1.5
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 4.1</b>	<b>\$ 7.2</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

The estimate was developed based on 2014 historical cost data and uses an inflation factor based on the midpoint of the construction season. Inflation factor and scope changes identified in the project history were updated in 2015 resulting in a significant increase in the cost estimate. The current estimate is the construction letting amount.

## Project Risks

The project is lengthy and may cause local traffic problems.

## Schedule

Environmental Approval Date: 10/06/2015  
 Municipal Consent Approval Date: Not Needed  
 Geometric Layout Approval Date: Not Needed  
 Construction Limits Established Date: Not Needed  
 Original Letting Date: 08/26/2016  
 Current Letting Date: 10/28/2016  
 Construction Season: 2017  
 Estimated Substantial Completion: Nov. 2017



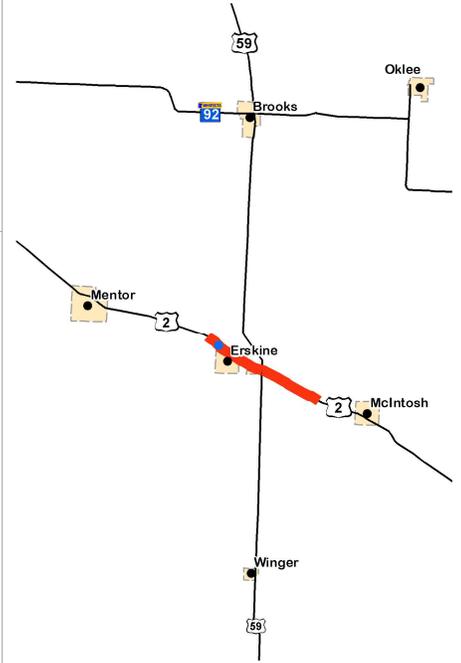
Minnesota Department of Transportation  
 District 2  
 3920 Highway 2 West  
 (218) 755-6500

**District Engineer:** Craig Collison  
**Project Manager:** Deb Bauer

**Revised Date:** 12/15/2016

# PROJECT SUMMARY

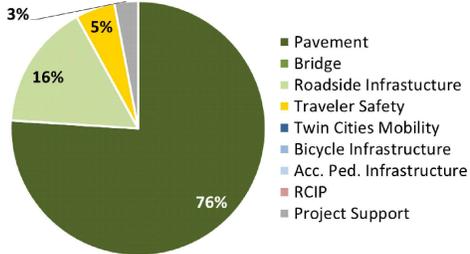
Hwy 2  
 In Erskine  
 Bridge 60006, 60007  
 State Project No. 6004-24  
 NA



## Primary Purpose

Performance-based Need: Pavement

## Investment Category



## Project Description

The project consists of replacing 5.5 miles of concrete pavement, replacing curb and gutter, replacing or repairing failing drainage infrastructure, constructing an auxiliary lane at the railroad crossing and rehabilitating two bridges.

## Recent Changes and Updates

Project was advanced to 2018, Bridge 91262 rehabilitation was removed from this project and included in SP 6003-34, replacement of some pavement at the Erskine weigh station was added, and rehabilitation of Bridges 60006 & 60007 (Hwy 59 Overpass) were added. Project will now be Design-Build to advance delivery.

## Project History

The pavement surface ride quality on US 2 and US 59 ramps are projected to drop below acceptable levels by 2018. Culverts and storm sewers along the corridor are over 40 years old. There were several rear-end crashes at the railroad crossing because trucks are required to stop before crossing the tracks on a high speed multilane highway. The bridge at the west end of the project has separated joints causing voids underneath the pavement.

The purpose of the project is to extend the useful service life of the pavement and to provide a smooth riding surface for the traveling public. It would also improve drainage, upgrade the existing roadside infrastructure (storm sewer system) and improve safety at the railroad

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2017

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 8.4	\$ 10.8
Other Construction Elements:	\$ 0.4	\$ 0.4
Engineering:	\$ 1.7	\$ 1.7
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 10.5</b>	<b>\$ 12.9</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

The Baseline Estimate was developed based on 2015 historical cost data and uses an inflation factor tied to the midpoint of the construction season. The rehabilitation of Bridges 60006 & 60007 (Hwy 59 Overpass) and replacement of some pavement at the Erskine weigh station was added to this project resulting in an increase of the current estimate.

## Project Risks

The weigh station and rest area adjacent to project will be impacted by construction staging. Local traffic and businesses may be disrupted during construction.

## Schedule

Environmental Approval Date: Pending Approval  
 Municipal Consent Approval Date: Not Needed  
 Geometric Layout Approval Date: Not Needed  
 Construction Limits Established Date: Pending Approval  
 Original Letting Date: 2019  
 Current Letting Date: 05/18/2018  
 Construction Season: 2018  
 Estimated Substantial Completion: Nov. 2018



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 (218) 755-6500

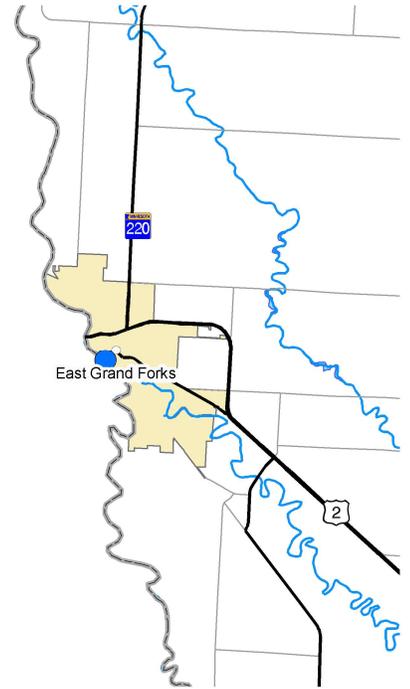
District Engineer: Craig Collison  
 Project Manager: Jim Bittmann

Revised Date: 12/15/2016

## PROJECT SUMMARY

Hwy 2B  
Over the Red River in East Grand Forks  
Bridge 4700  
State Project No. 6015-07

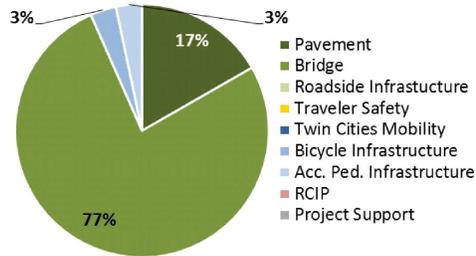
NA  
**Substantially Complete**



### Primary Purpose

Performance-based Need: Bridge Condition

### Investment Category



### Project Description

The project consists of rehabilitating the bridge over the Red River on Hwy 2B (Demers Avenue) in East Grand Forks.

### Recent Changes and Updates

Project is substantially complete.

### Project History

Bridge rehabilitation was determined to be the appropriate improvement to extend the service life of the bridge. The project was accelerated to 2015 to avoid traffic impacts with the Kennedy Bridge Rehabilitation. Revising the scope to rehabilitation from reconstruction resulted in a significant reduction in cost.

North Dakota DOT is the lead agency for this project. In 2013 and early 2014, the engineering consultant performed structural reviews of the bridge to determine the in-place condition and remaining bridge life. This review indicated a bridge rehabilitation will extend the life of the bridge for a significant time period. This bridge was constructed in 1929 and remodeled in 1986. The structure is historically significant.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2015

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 14.7	\$ 2.3
Other Construction Elements:	\$ 17.8	\$ 0.5
Engineering:	\$ 3.1	\$ 0.7
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 35.6</b>	<b>\$ 3.5</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

The Current Estimate is based on actual costs. Other Construction Elements represents North Dakota's cost share. The significant cost reduction is attributed to scope revisions discussed in the Project History.

### Project Risks

No remaining risks.

### Schedule

Environmental Approval Date: 05/22/2015  
Municipal Consent Approval Date: Not Needed  
Geometric Layout Approval Date: Not Needed  
Construction Limits Established Date: Not Needed  
Original Letting Date: 11/15/2017  
Current Letting Date: 05/22/2015  
Construction Season: 2015  
Estimated Substantial Completion: Nov. 2015



Minnesota Department of Transportation  
District 2  
3920 Highway 2 West  
(218) 755-6500

District Engineer: Craig Collison  
Project Manager: Joe Mckinnon

Revised Date: 12/15/2016

## PROJECT SUMMARY

Hwy 11  
From CSAH 15 to Roseau  
Bridge 68X06  
State Project No. 6802-27

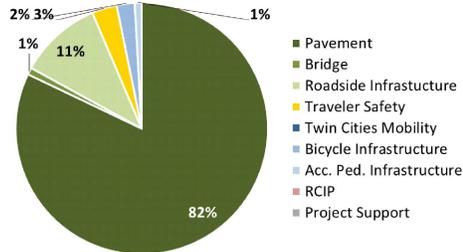
NA  
**Substantially Complete**



### Primary Purpose

Performance-based Need: Pavement

### Investment Category



### Project Description

The project includes reclaiming 3 miles of highway, extending the center turn lane, widening shoulders, replacing one signal, replacing culverts, replacing four pedestrian ramps and replacing signage.

### Recent Changes and Updates

Readdressed some turf establishment and drainage issues near the frontage road in Roseau in 2016. Project was substantially complete in October 2016.

### Project History

The project has been let and awarded to Minn-Dak Asphalt Inc. Additional sidewalk and storm sewer upgrades were needed to improve accessibility and drainage within Roseau.

The pavement conditions on Hwy 11 are projected to be unacceptable by 2017. The corridor lacks adequate shoulders and turning lanes. The traffic signal at TH 310 is not ADA compliant. Centerline culvert crossings are in poor condition. Sidewalks in Roseau do not comply with ADA standards.

The project provides a smooth riding surface, improves traffic mobility and safety, extends the useful life of roadside infrastructure and improves the accessibility of sidewalks.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2012

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 2.6	\$ 4.1
Other Construction Elements:	\$ 0.2	\$ 0.3
Engineering:	\$ 0.5	\$ 0.6
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 3.3</b>	<b>\$ 5.0</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

The Baseline Estimate was developed based on 2012 historical cost data and uses an inflation factor applied to the midpoint of the construction season. The Current Estimate is based on actual costs. The significant cost increase can be attributed to scope changes identified in the project history.

### Project Risks

No remaining risks.

### Schedule

Environmental Approval Date: 01/27/2014  
Municipal Consent Approval Date: Not Needed  
Geometric Layout Approval Date: Not Needed  
Construction Limits Established Date: 01/27/2014  
Original Letting Date: 01/30/2015  
Current Letting Date: 01/30/2015  
Construction Season: 2015  
Estimated Substantial Completion: Oct. 2015



Minnesota Department of Transportation  
District 2  
3920 Highway 2 West  
(218) 755-6500

District Engineer: Craig Collison  
Project Manager: Shawn Groven

Revised Date: 12/15/2016

# PROJECT SUMMARY

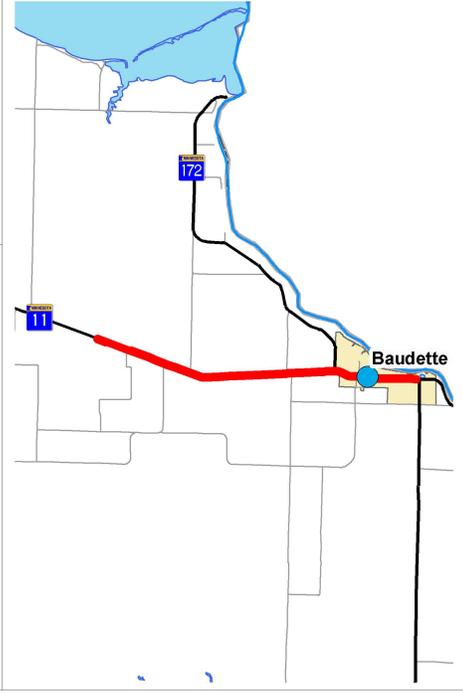
Hwy 11

Over 7 miles west of Baudette on Hwy 11 to Baudette

Bridge 39007

State Project No. 3901-41

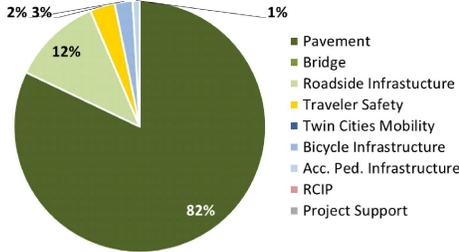
Substantially Complete



## Primary Purpose

Performance-based Need: Pavement

## Investment Category



## Project Description

The project consists of resurfacing 9.9 miles of pavement, reconstructing 1.3 miles of urban section pavement, rehabilitating one urban bridge, replacing four culverts, constructing five bypass/turn lanes and upgrading 15 blocks of sidewalk.

## Recent Changes and Updates

Project was substantially complete in Sept 2016.

## Project History

Project was let and awarded to Davidson Construction Inc. MnDOT expanded the project to include reconstruction of 1.3 miles of urban highway in Baudette to better accommodate ADA improvements and local utility needs, and to include the rehabilitation of a bridge over the Baudette River. Expanding the scope provides efficiencies and constrains traffic impacts to one construction season.

Pavement quality is projected to drop below acceptable levels by 2019. The existing sidewalks and pedestrian ramps are not ADA compliant. Bridge 39007 has a deteriorated deck. The storm sewer is undersized and does not adequately drain the city. Culverts are in poor condition, and intersections lack turning lanes.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2011

	Baseline Est.	Current Est.
Construction Letting:	\$ 3.2	\$ 8.9
Other Construction Elements:	\$ 0.1	\$ 0.5
Engineering:	\$ 0.5	\$ 1.1
Right of Way:	\$ 0.0	\$ 0.3
<b>Total:</b>	<b>\$ 3.8</b>	<b>\$ 10.8</b>

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

## Key Cost Estimate Assumptions

The Baseline Estimate was developed based on 2013 historical cost data and uses an inflation factor applied to the midpoint of the construction season. The significant cost increase can be attributed to scope changes identified in the project history.

## Project Risks

Local traffic and businesses may be disrupted by the length, complexity and urban setting of the project

## Schedule

Environmental Approval Date: 11/25/2015  
 Municipal Consent Approval Date: Not Needed  
 Geometric Layout Approval Date: Not Needed  
 Construction Limits Established Date: 01/13/2015  
 Original Letting Date: 03/27/2015  
 Current Letting Date: 04/22/2016  
 Construction Season: 2016  
 Estimated Substantial Completion: Sept. 2016



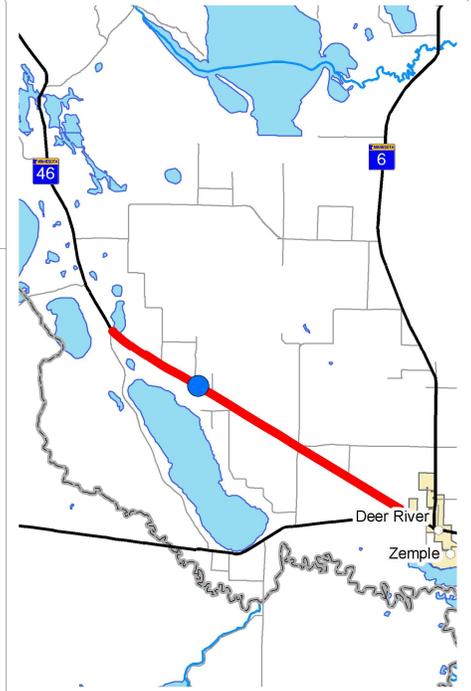
Minnesota Department of Transportation  
 District 2  
 3920 Highway 2 West  
 (218) 755-6500

District Engineer: Craig Collison  
 Project Manager: Joe Mckinnon

Revised Date: 12/15/2016

## PROJECT SUMMARY

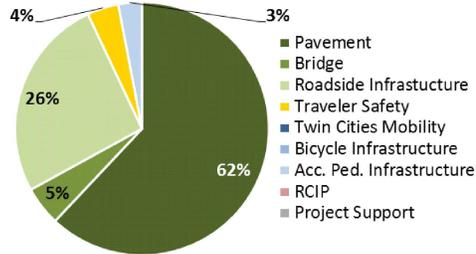
Hwy 46  
From Hwy 2 to Itasca Hwy 39  
Bridge 5623  
State Project No. 3109-41M  
NA



### Primary Purpose

Performance-based Need: Pavement

### Investment Category



### Project Description

The project consists of reclaiming 10.1 miles of pavement, replacing one box culvert bridge, replacing 53 failing culverts, constructing four turn lanes, constructing a truck pull off area and replacing signs.

### Recent Changes and Updates

The pavement improvement was upgraded to a reclaim on the entire length of the project with Chapter 3 funds.

### Project History

The pavement improvement was upgraded to a reclaim on the northern section of the highway in 2016 due to worse than expected pavement conditions. A new entrance and right turn lane was constructed on Hwy 46 by the White Oak Casino.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2015

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 4.2	\$ 7.2
Other Construction Elements:	\$ 0.2	\$ 0.2
Engineering:	\$ 0.8	\$ 0.9
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 5.2</b>	<b>\$ 8.3</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

The Baseline Estimate was developed based on 2013 historical cost data and uses an inflation factor to the midpoint of construction. The inflation factor and pavement fix changes were updated in 2016 resulting in an increase in the cost estimate. The current estimate reflects the upgraded pavement fix of reclaiming the entire length of the project.

### Project Risks

Culverts are in extremely poor condition and may fail prior to construction letting. The project's location within the Chippewa National Forest and the Leech Lake Band of Ojibwe Reservation may lengthen schedule or increase costs. Proposed development at the White Oak Casino may effect shoulder access and project costs.

### Schedule

Environmental Approval Date: 02/23/2017  
Municipal Consent Approval Date: Not Needed  
Geometric Layout Approval Date: Not Needed  
Construction Limits Established Date: 10/24/2016  
Original Letting Date: 03/23/2018  
Current Letting Date: 12/15/2017  
Construction Season: 2018  
Estimated Substantial Completion: Nov. 2018



Minnesota Department of Transportation  
District 2  
3920 Highway 2 West  
(218) 755-6500

District Engineer: Craig Collison  
Project Manager: Rachel Miller

Revised Date: 12/15/2016

# PROJECT SUMMARY

Hwy 59  
 From Hwy 175 to the Canadian border  
 Bridge 35X10  
 State Project No. 3505-19

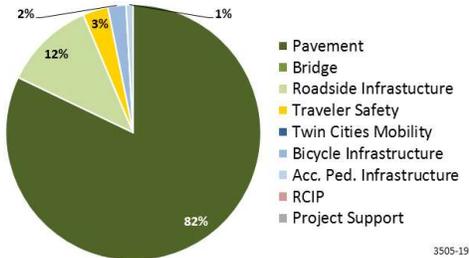
NA  
**Substantially Complete**



## Primary Purpose

Performance-based Need: Pavement

## Investment Category



3505-19

## Project Description

The project resurfaces 18 miles of highway, replaces failing culverts and a storm sewer in Lancaster.

## Recent Changes and Updates

Project was substantially complete in September 2016.

## Project History

This segment of roadway was in need of pavement improvement. The project's purpose is to improve the ride and surface condition, increase pavement strength and extend the life of the pavement.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2012

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 4.3	\$ 3.4
Other Construction Elements:	\$ 0.3	\$ 0.2
Engineering:	\$ 0.8	\$ 0.3
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 5.4</b>	<b>\$ 3.9</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

The Baseline Estimate was developed based on 2012 historical cost data and uses an inflation factor tied to the midpoint of the construction season. The Current Estimate is based on actual costs. Savings can be attributed to better than expected bituminous prices.

## Project Risks

No remaining risks

## Schedule

Environmental Approval Date: 09/10/2015  
 Municipal Consent Approval Date: Not Needed  
 Geometric Layout Approval Date: Not Needed  
 Construction Limits Established Date: Not Needed  
 Original Letting Date: 04/22/2016  
 Current Letting Date: 02/26/2016  
 Construction Season: 2016  
 Estimated Substantial Completion: Sept. 2016



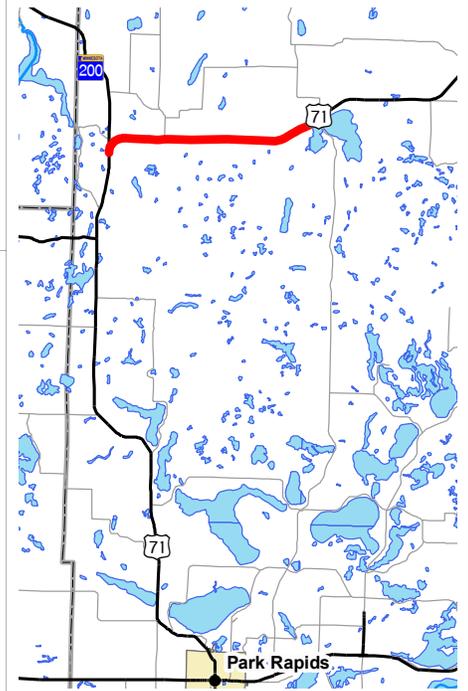
Minnesota Department of Transportation  
 District 2  
 3920 Highway 2 West  
 (218) 755-6500

**District Engineer:** Craig Collison  
**Project Manager:** Ray Gust

**Revised Date:** 12/15/2016

# PROJECT SUMMARY

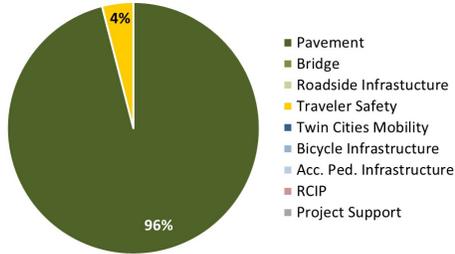
Hwy 71  
 From south of Hwy 200 to southern limits of Lake George  
 Bridge NA  
 State Project No. 2906-18  
 NA



## Primary Purpose

Performance-based Need: Pavement

## Investment Category



## Project Description

The project consists of reclaiming 7.5 miles of pavement, constructing four new right turn lanes, widening one bypass lane and lighting at the Hwy 200 intersection.

## Recent Changes and Updates

Project was let and awarded to Mark Sand & Gravel Co. Currently under construction.

## Project History

Project was advanced to 2017 construction season due to a significant drop in pavement conditions. The pavement surface on Hwy 71 is predicted to be unacceptable by 2017. Key intersections along the corridor lack turning lanes, the intersection of Hwy 71 and Hwy 200 lacks lighting and the bypass lane at Hwy 200 is too narrow. The purpose of this project is to extend the useful service life of the pavement, provide a smooth riding surface, improve traveler safety and reduce crashes along the corridor.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2016

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 4.2	\$ 2.6
Other Construction Elements:	\$ 0.2	\$ 0.1
Engineering:	\$ 0.8	\$ 0.7
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 5.2</b>	<b>\$ 3.4</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

The estimate was developed based on 2014 historical cost data and uses an inflation factor tied to the midpoint of the construction season. Inflation factor and construction year was updated in 2016 resulting in a reduction in the cost estimate. The current estimate is the construction letting amount.

## Project Risks

The project is lengthy and there may be local and recreational traffic impacts. Road conditions may degrade and increase project duration or cost.

## Schedule

Environmental Approval Date: 10/07/2016  
 Municipal Consent Approval Date: Not Needed  
 Geometric Layout Approval Date: Not Needed  
 Construction Limits Established Date: Not Needed  
 Original Letting Date: 02/23/2018  
 Current Letting Date: 03/02/2017  
 Construction Season: 2017  
 Estimated Substantial Completion: Nov. 2017



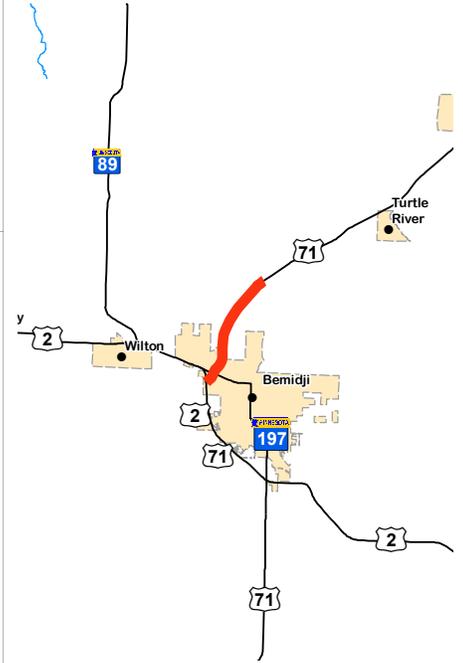
Minnesota Department of Transportation  
 District 2  
 3920 Highway 2 West  
 (218) 755-6500

**District Engineer:** Craig Collison  
**Project Manager:** Stephen Frisco

**Revised Date:** 12/15/2016

## PROJECT SUMMARY

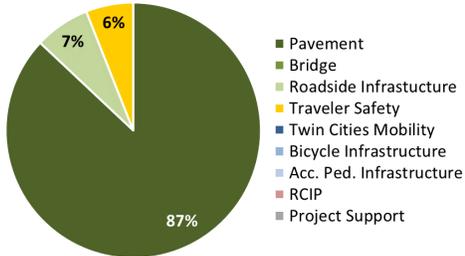
Hwy 71  
From Hwy 197 to 5 miles North of Bemidji  
Bridge NA  
State Project No. 0410-50  
NA



### Primary Purpose

Performance-based need: Pavement Condition

### Investment Category



### Project Description

The project consists of 10 miles of bituminous reclamation, painting two signal systems, construction of four turn lanes, and replacement of 11 median drains.

### Recent Changes and Updates

No changes.

### Project History

This is a new project added to the 2017-2020 STIP. The project was scoped and a baseline estimate was prepared. The pavement on Hwy 71 is predicted to drop below acceptable levels by 2022. The project will extend the useful service life of the pavement and provide a smooth riding surface.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2016

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 4.6	\$ 4.6
Other Construction Elements:	\$ 0.2	\$ 0.2
Engineering:	\$ 0.9	\$ 0.9
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 5.7</b>	<b>\$ 5.7</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

The Baseline Estimate was developed based on 2015 historical cost data and uses an inflation factor to the midpoint of the year of construction.

### Project Risks

High volume corridor. Critical connection to hospital and for commuters north of Bemidji. Beltrami County is proposing to reclaim an alternative route (CSAH 15) in the same construction year.

### Schedule

Environmental Approval Date: Pending Approval  
Municipal Consent Approval Date: Not Needed  
Geometric Layout Approval Date: Not Needed  
Construction Limits Established Date: Pending Approval  
Original Letting Date: 04/26/2019  
Current Letting Date: 04/26/2019  
Construction Season: 2020  
Estimated Substantial Completion: Nov. 2020

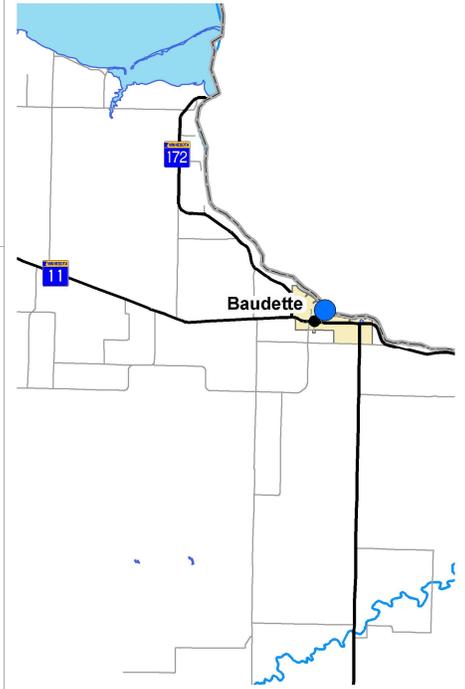


Minnesota Department of Transportation  
District 2  
3920 Highway 2 West  
(218) 755-6500

**District Engineer:** Craig Collison  
**Project Manager:** Brandy Pemberton  
**Revised Date:** 12/15/2016

# PROJECT SUMMARY

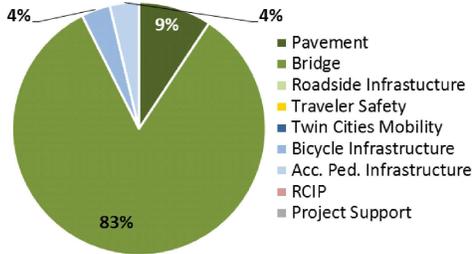
Hwy 72  
 In Baudette over the Rainy River  
 Bridge 9412  
 State Project No. 3905-09  
 NA



## Primary Purpose

Performance-based Need: Bridge Condition

## Investment Category



## Project Description

The project replaces a bridge over the Rainy River in Baudette.

## Recent Changes and Updates

The project is on schedule and will use a design-bid-build procurement method. The final design package is nearing completion.

## Project History

The project is in the final design phase. The district investigated different procurement methods for contracting final design and construction.

In early 2014, MnDOT and the Ontario Ministry of Transportation discussed the preliminary design of a bridge replacement. In July of 2014, an engineering consultant was selected to complete the preliminary design. The major tasks include completing the Environmental Assessment, reviewing and recommending bridge alternatives and reviewing and recommending a bridge alignment. The preliminary design will be completed in January 2016.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2014

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 15.5	\$ 15.5
Other Construction Elements:	\$ 20.0	\$ 20.0
Engineering:	\$ 4.5	\$ 4.5
Right of Way:	\$ 0.3	\$ 0.3
<b>Total:</b>	<b>\$ 40.3</b>	<b>\$ 40.3</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

The Baseline Estimate was developed based on 2012 historical cost data and uses a standard inflation factor. Other Construction Elements include Canada's cost.

## Project Risks

Complexities in administering a project with Canada. New alignment alternatives are limited and have potential cultural and/or major utility impacts. Coordination with Customs and Border Protection for alignment alternatives may affect the existing port building and border security during construction.

## Schedule

Environmental Approval Date: Pending Approval  
 Municipal Consent Approval Date: Not Needed  
 Geometric Layout Approval Date: Not Needed  
 Construction Limits Established Date: Pending Approval  
 Original Letting Date: 11/17/2017  
 Current Letting Date: 02/23/2018  
 Construction Season: 2018 & 2019  
 Estimated Substantial Completion: Nov. 2019



Minnesota Department of Transportation  
 District 2  
 3920 Highway 2 West  
 (218) 755-6500

District Engineer: Craig Collison  
 Project Manager: Joe McKinnon

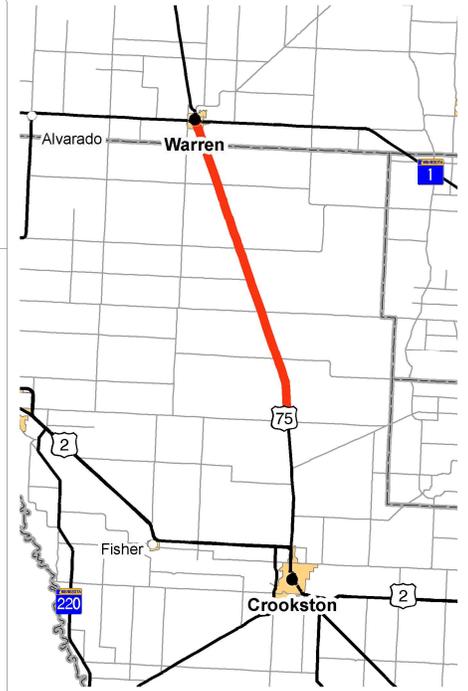
Revised Date: 12/15/2016

# PROJECT SUMMARY

Hwy 75

From north of Hwy 2 to south of Hwy 1 in Warren  
 Bridge 3958, 8393, 8394, 3959, 4463, &, 6631  
 State Project No. 6011-24

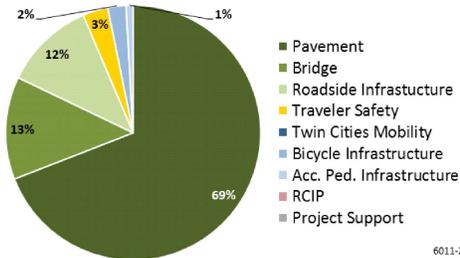
**Substantially Complete**



## Primary Purpose

Performance-based Need: Pavement

## Investment Category



6011-24

## Project Description

The project consists of resurfacing 20 miles of highway, shoulder paving south of Warren, replacing 6 box culvert bridges and replacing 13 failing culverts.

## Recent Changes and Updates

Project was substantially complete in July 2016.

## Project History

Project was let and awarded to Knife River Materials. Shoulder paving south of Warren was added to the project to address bicycle needs identified by the community.

Replacement of the bridge and four culverts were removed from the project and added to SP 6011-29. This project was delayed from 2014 to 2016 to free up funding for changes to other projects in the STIP. The delay resulted in a slight cost increase.

This segment is in need of pavement improvement. The project's purpose is to improve the ride and surface condition, pavement strength and extended pavement life.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2010

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 5.7	\$ 4.6
Other Construction Elements:	\$ 0.4	\$ 0.1
Engineering:	\$ 1.2	\$ 0.4
Right of Way:	\$ 0.1	\$ 0.1
<b>Total:</b>	<b>\$ 7.4</b>	<b>\$ 5.2</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

The Baseline Estimate was developed based on 2013 historical cost data and uses a standard inflation factor. The Current Estimate is based on actual costs. Bid savings can be attributed to better than expected bituminous prices.

## Project Risks

The project may cause delays and problems for local and agricultural traffic.

## Schedule

Environmental Approval Date: 02/09/2015  
 Municipal Consent Approval Date: Not Needed  
 Geometric Layout Approval Date: Not Needed  
 Construction Limits Established Date: 02/09/2015  
 Original Letting Date: 12/20/2013  
 Current Letting Date: 12/18/2015  
 Construction Season: 2016  
 Estimated Substantial Completion: July 2016



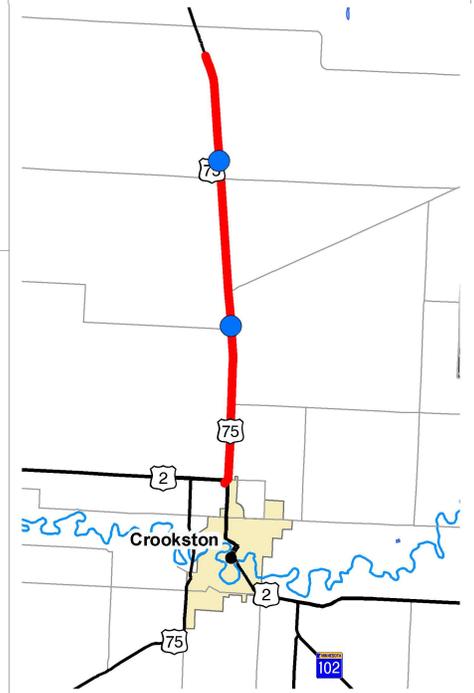
Minnesota Department of Transportation  
 District 2  
 3920 Highway 2 West  
 (218) 755-6500

District Engineer: Craig Collison  
 Project Manager: Rachel Miller

Revised Date: 12/15/2016

## PROJECT SUMMARY

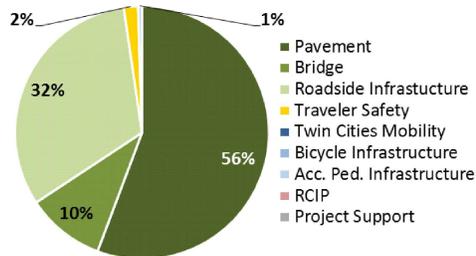
Hwy 75  
 From Hwy 2 to Polk Hwy 19  
 Bridge 8391, 8392  
 State Project No. 6011-29  
 NA



### Primary Purpose

Performance-based Need: Pavement

### Investment Category



### Project Description

The project consists of resurfacing 12 miles of highway, replacing two box culvert bridges, replacing 29 failing culverts and constructing a new storm sewer system and pedestrian ramps in Euclid

### Recent Changes and Updates

The pavement fix was changed and a section of mill and overlay on Hwy 1 in Oslo was added.

### Project History

Pavement quality will not be acceptable by 2018. The bridges are over 80 years old and lack an adequate recovery area for run-off-the-road vehicles. Concrete box culvert crossings and entrance culverts may fail. Curb & gutter in Euclid do not drain properly. Sidewalks in Euclid do not meet the ADA standards.

The project's purpose is to improve the ride and surface condition, provide structurally sound bridge crossings, to perpetuate existing drainage infrastructure, to improve the accessibility of Euclid's sidewalks and to improve drainage in Euclid.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2015

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 5.6	\$ 6.5
Other Construction Elements:	\$ 0.3	\$ 0.3
Engineering:	\$ 1.0	\$ 1.0
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 6.9</b>	<b>\$ 6.8</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

The Baseline Estimate was developed based on 2013 historical cost data and uses an inflation factor to the midpoint of construction. The inflation factor was updated in 2016 resulting in a minor reduction in the cost estimate. The pavement fix was changed and a section of mill and overlay on Hwy 1 was added which resulted in an increase of the current estimate.

### Project Risks

The project is lengthy and there may be local traffic and agricultural traffic impacts. Road conditions may degrade and increase project duration or cost.

### Schedule

Environmental Approval Date: 01/09/2017  
 Municipal Consent Approval Date: Not Needed  
 Geometric Layout Approval Date: Not Needed  
 Construction Limits Established Date: 08/18/2016  
 Original Letting Date: 02/23/2018  
 Current Letting Date: 10/27/2017  
 Construction Season: 2018  
 Estimated Substantial Completion: Nov. 2018



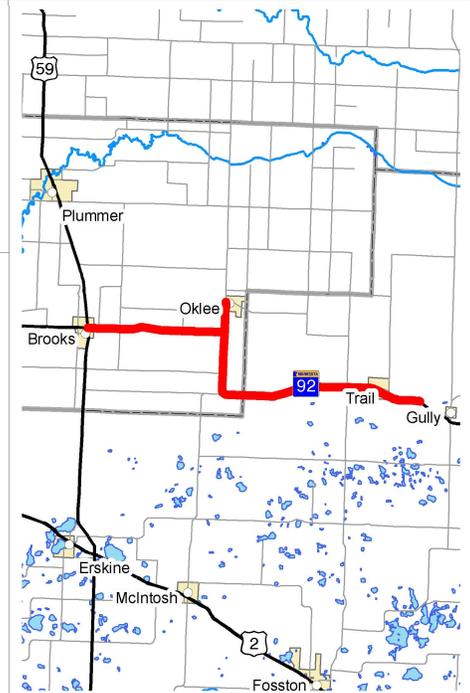
Minnesota Department of Transportation  
 District 2  
 3920 Highway 2 West  
 (218) 755-6500

District Engineer: Craig Collison  
 Project Manager: Ray Gust

Revised Date: 12/15/2016

## PROJECT SUMMARY

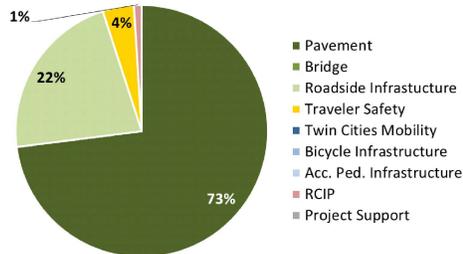
Hwy 92  
From Hwy 59 to Trail  
Bridge NA  
State Project No. 6305-18  
NA



### Primary Purpose

Performance-based Need: Pavement

### Investment Category



### Project Description

The project consists of resurfacing 21 miles of highway and replacing three culvert crossings.

### Recent Changes and Updates

Resurfacing of Hwy 222 was removed from the project as the district is in negotiations to turnback to Red Lake County. The project is in the final design phase and is on schedule for construction in 2018.

### Project History

The pavement ride quality on Hwy 92 has fallen below an acceptable level. There are centerline culverts and entrance culverts that are in poor condition and may fail. The purpose of the project is to extend the useful service life of the pavement, provide a smooth riding surface and perpetuate existing drainage infrastructure.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2016

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 4.4	\$ 3.9
Other Construction Elements:	\$ 0.2	\$ 0.2
Engineering:	\$ 0.8	\$ 0.9
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 5.4</b>	<b>\$ 5.2</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

The Baseline Estimate was developed based on 2014 historical cost data and uses an inflation factor tied to the midpoint of the construction season. The inflation factor was updated in 2016 resulting in a minor reduction in the cost estimate.

### Project Risks

If the duration of the project causes traffic problems, the pace of the project may have to be changed.

### Schedule

Environmental Approval Date: 08/25/17  
Municipal Consent Approval Date: Not Needed  
Geometric Layout Approval Date: Not Needed  
Construction Limits Established Date: Pending Approval  
Original Letting Date: 12/15/2017  
Current Letting Date: 12/15/2017  
Construction Season: 2018  
Estimated Substantial Completion: Nov. 2018



Minnesota Department of Transportation  
District 2  
3920 Highway 2 West  
(218) 755-6500

District Engineer: Craig Collison  
Project Manager: Brandy Pemberton  
Revised Date: 12/15/2016

# PROJECT SUMMARY

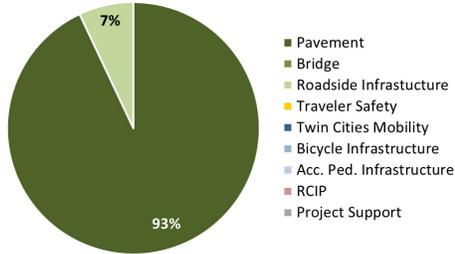
Hwy 175  
 North Dakota Border to Hallock  
 Bridge NA  
 State Project No. 3515-16  
 NA



## Primary Purpose

Performance-based Need: Pavement

## Investment Category



## Project Description

The project consists of resurfacing 9.7 miles of pavement, reconstructing overflow areas with grade raise restrictions and replacing 34 entrance culverts.

## Recent Changes and Updates

Project was let and awarded to Knife River Materials. Currently under construction.

## Project History

The project was advanced to the 2017 construction season, which allowed the pavement fix to be downscoped to a thin overlay resulting in a significant cost decrease. The pavement of Hwy 175 is predicted to be unacceptable by 2020. Shoulders do not drain properly and are deteriorating rapidly. Existing culverts are in poor condition. The project will extend the useful service life of the pavement, provide a smooth riding surface, improve drainage of the subgrade, strengthen shoulders and upgrade failing roadside infrastructure.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2015

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 4.6	\$ 2.5
Other Construction Elements:	\$ 0.2	\$ 0.1
Engineering:	\$ 0.8	\$ 0.6
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 5.6</b>	<b>\$ 3.7</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

The estimate was developed based on 2014 historical cost data and uses an inflation factor to the midpoint of the year of construction. Inflation factor, construction year and pavement fix changes were updated in 2016 resulting in a reduction in the cost estimate. The current estimate is the construction letting amount.

## Project Risks

The project is lengthy and there may be local and agricultural traffic impacts. The highway is prone to seasonal flooding in the spring.

## Schedule

Environmental Approval Date: 06/24/2016  
 Municipal Consent Approval Date: Not Needed  
 Geometric Layout Approval Date: Not Needed  
 Construction Limits Established Date: 06/24/2016  
 Original Letting Date: 04/27/2018  
 Current Letting Date: 04/28/2017  
 Construction Season: 2017  
 Estimated Substantial Completion: Nov. 2017



Minnesota Department of Transportation  
 District 2  
 3920 Highway 2 West  
 (218) 755-6500

**District Engineer:** Craig Collison  
**Project Manager:** Ray Gust

**Revised Date:** 12/15/2016

# PROJECT SUMMARY

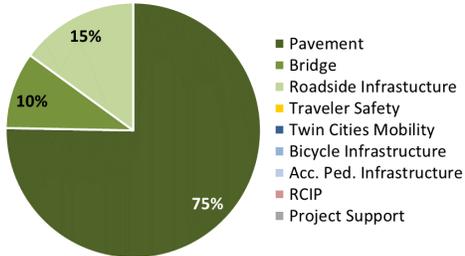
Hwy 200  
 From Walker to Hwy 84  
 Bridge 8136, &, 8533  
 State Project No. 1106-15M  
 NA



## Primary Purpose

Performance-based need: Pavement Condition

## Investment Category



## Project Description

The project consists of resurfacing 15.5 miles of pavement, reconstructing two box culvert bridges, replacing 13 culverts, paving shoulders and constructing 14 turning lanes.

## Recent Changes and Updates

The project is in the preliminary design phase and is on schedule for construction in 2019.

## Project History

The project received additional Highway Safety Improvement Program funds to pave the shoulders an additional 2 feet.

The purpose of the project is to extend the useful service life of the pavement, to provide a smooth riding surface for the traveling public, to provide a structurally sound and reliable bridge crossing on TH 200 over Bag Creek and Cedar Creek, to perpetuate existing roadside infrastructure, to improve traffic safety and reduces crashes along the corridor and to improve the accommodations for bicycles and pedestrians.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2016

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 7.1	\$ 7.0
Other Construction Elements:	\$ 0.3	\$ 0.3
Engineering:	\$ 1.3	\$ 1.3
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 8.7</b>	<b>\$ 8.6</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

The Baseline Estimate was developed based on 2014 historical cost data and uses an inflation factor tied to the midpoint of the construction season. The inflation factor was updated in 2016 resulting in a reduction in the cost estimate.

## Project Risks

The project is lengthy and there may be local and recreational traffic impacts. Road conditions may degrade and increase project duration or cost. The project requires additional coordination with the Leech Lake Band of Ojibwe and Chippewa National Forest.

## Schedule

Environmental Approval Date: Pending Approval  
 Municipal Consent Approval Date: Not Needed  
 Geometric Layout Approval Date: Not Needed  
 Construction Limits Established Date: Not Needed  
 Original Letting Date: 10/26/2018  
 Current Letting Date: 02/22/2019  
 Construction Season: 2019  
 Estimated Substantial Completion: Nov. 2019



Minnesota Department of Transportation  
 District 2  
 3920 Highway 2 West  
 (218) 755-6500

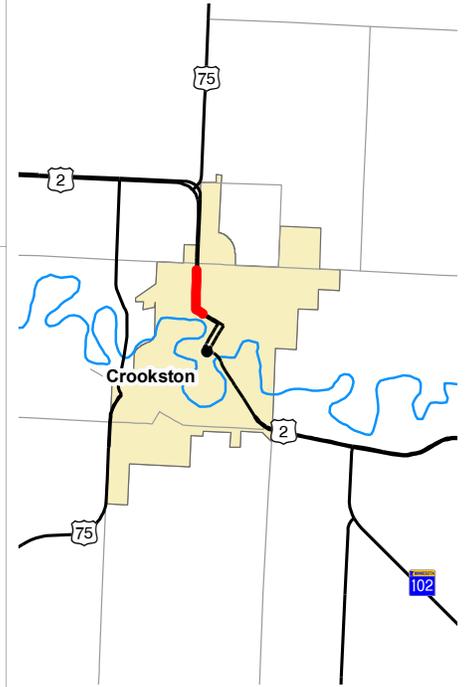
**District Engineer:** Craig Collison  
**Project Manager:** Stephen Frisco

**Revised Date:** 12/15/2016

## PROJECT SUMMARY

Hwy 2  
Slope protection in Crookston  
Bridge NA  
State Project No. 6002-72

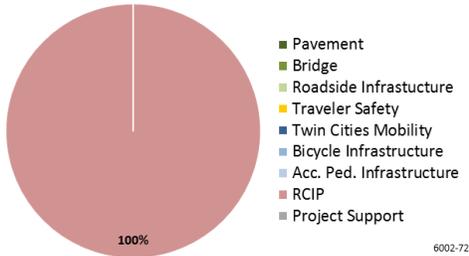
**Substantially Complete**



### Primary Purpose

Regional & Community Improvement Project

### Investment Category



### Project Description

The project consists of providing slope protection along Hwy 2 adjacent to the Red Lake River in Crookston.

### Recent Changes and Updates

Project is substantially complete.

### Project History

Shear walls were installed and the slope was graded. The project experienced delays because of asbestos found during the project. The project was awarded as a design-build contract. The estimated substantial completion date was modified to reflect the contract documents. In 2012, the inslope adjacent to Hwy 2 in an urban portion of Crookston showed signs of possible slope failure. An alternative to protect the inslope with reinforcement would be installed. Slope monitoring devices were installed.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2013

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 5.6	\$ 6.4
Other Construction Elements:	\$ 0.0	\$ 4.1
Engineering:	\$ 1.4	\$ 0.9
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 7.0</b>	<b>\$ 11.4</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

The Baseline Estimate was developed based on 2013 historical cost data and uses an inflation factor applied to the midpoint of the construction season. The Current Estimate is based on actual costs. The significant cost increase can be attributed to asbestos materials unearthed during construction.

### Project Risks

No remaining risks.

### Schedule

Environmental Approval Date: 10/04/2013  
Municipal Consent Approval Date: Not Needed  
Geometric Layout Approval Date: Not Needed  
Construction Limits Established Date: 10/04/2013  
Original Letting Date: 03/26/2014  
Current Letting Date: 03/26/2014  
Construction Season: 2014  
Estimated Substantial Completion: Sept. 2015



Minnesota Department of Transportation  
District 2  
3920 Highway 2 West  
(218) 755-6500

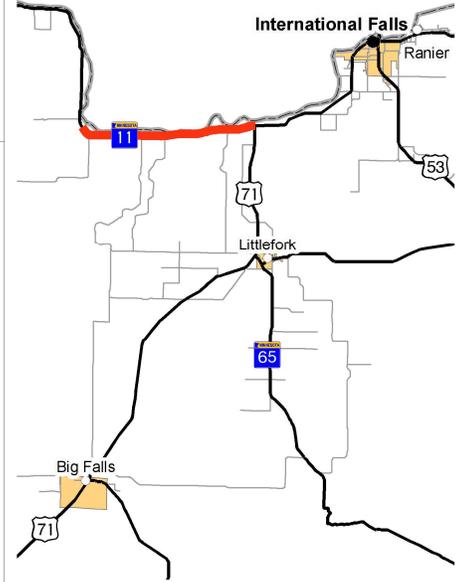
**District Engineer:** Craig Collison  
**Project Manager:** Paul Konickson

**Revised Date:** 12/15/2016

## PROJECT SUMMARY

Hwy 11  
West of Loman to the junction of TH 71 at Pelland  
Bridge NA  
State Project No. 3604-73M

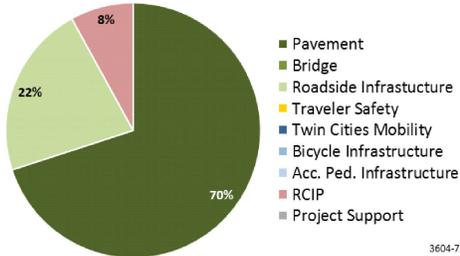
Substantially Complete



### Primary Purpose

Performance-based Need: Pavement

### Investment Category



3604-73M

### Project Description

The project consists of resurfacing 11 miles of highway, widening shoulders and replacing failing culverts.

### Recent Changes and Updates

Project is substantially complete in October 2014.

### Project History

The project was in an isolated location and strict erosion control standards were necessary to protect the Rainy River. The design includes driveway and entrance revisions based on feedback from property owners. The design incorporates several small stormwater ponds for runoff control.

This project provides improved surface ride, wider shoulders, 10-ton pavement strength and additional shoulder width.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2011

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 6.5	\$ 7.0
Other Construction Elements:	\$ 0.3	\$ 0.0
Engineering:	\$ 1.1	\$ 1.1
Right of Way:	\$ 0.3	\$ 0.1
<b>Total:</b>	<b>\$ 8.2</b>	<b>\$ 8.2</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

The Current Estimate is based on actual costs. The increase in construction cost was caused by the isolated location of the project and the strict erosion control standards to protect the Rainy River.

### Project Risks

An isolated slope failure is being monitored and will be corrected with a separate project. No risks remain.

### Schedule

Environmental Approval Date: 07/26/2013  
Municipal Consent Approval Date: Not Needed  
Geometric Layout Approval Date: Not Needed  
Construction Limits Established Date: 06/01/2013  
Original Letting Date: 06/06/2014  
Current Letting Date: 04/25/2014  
Construction Season: 2014  
Estimated Substantial Completion: Oct. 2014



Minnesota Department of Transportation  
District 2  
3920 Highway 2 West  
(218) 755-6500

District Engineer: Craig Collison  
Project Manager: Todd Vonasek

Revised Date: 12/15/2016

# PROJECT SUMMARY

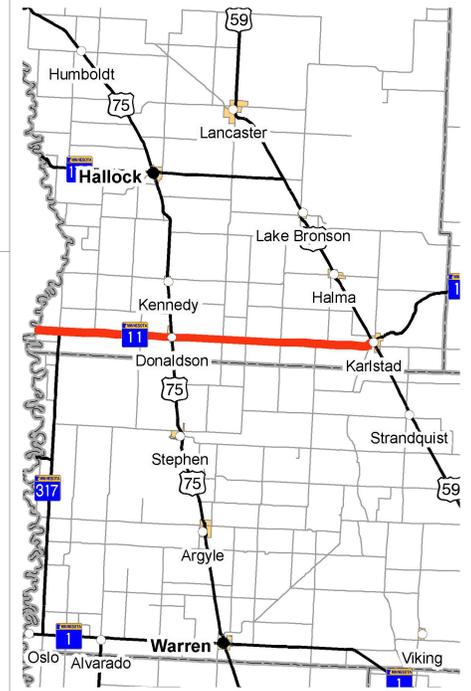
Hwy 11

From the Red River to the west end of Karlstad

Bridge 8513, &, 8514

State Project No. 3501-14

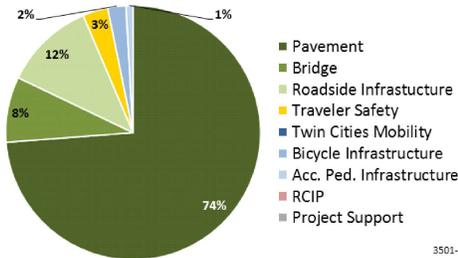
NA  
**Substantially Complete**



## Primary Purpose

Performance-based Need: Pavement

## Investment Category



3501-14

## Project Description

The project consists of resurfacing 21 miles of highway and replacing two box culvert bridges.

## Recent Changes and Updates

Project is substantially complete.

## Project History

This segment is in need of pavement improvement.

Since the initial project scoping, two miles of additional inslope slides occurred. The estimate increased to show the additional inslope repair and associated box culvert work. Additional slides are not anticipated because the deep ditch is only along a portion of Hwy 11.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2008

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 5.8	\$ 5.9
Other Construction Elements:	\$ 0.4	\$ 0.3
Engineering:	\$ 1.2	\$ 0.9
Right of Way:	\$ 0.1	\$ 0.0
<b>Total:</b>	<b>\$ 7.5</b>	<b>\$ 7.1</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

The Current Estimate is based on actual costs.

## Project Risks

Contractor is contesting the earthwork quantities. This could result in a \$75K-\$100K supplemental agreement.

## Schedule

Environmental Approval Date: 12/09/2013  
 Municipal Consent Approval Date: Not Needed  
 Geometric Layout Approval Date: Not Needed  
 Construction Limits Established Date: 12/09/2013  
 Original Letting Date: 04/27/2012  
 Current Letting Date: 04/25/2014  
 Construction Season: 2014  
 Estimated Substantial Completion: Nov. 2014



Minnesota Department of Transportation  
 District 2  
 3920 Highway 2 West  
 (218) 755-6500

District Engineer: Craig Collison  
 Project Manager: Shawn Groven

Revised Date: 12/15/2016



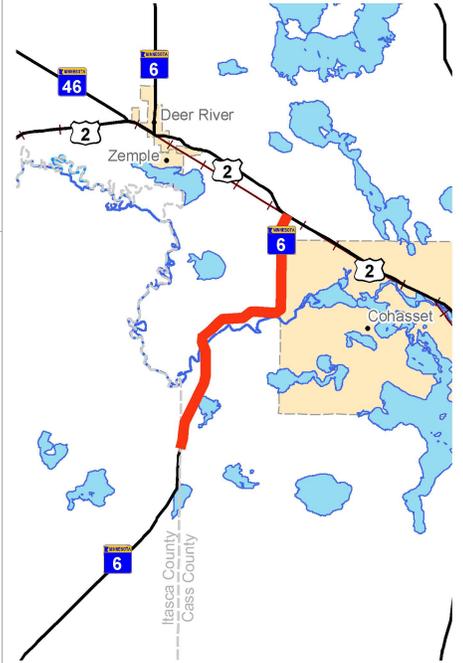
## District Project Summary

### District 3

Route	State Project #	Project Location	Page
MN 6	3106-24	Cass-Itasca County line to US 2 west of Cohasset	C 2
US 10	7102-135N/135	Xenia Avenue to Norfolk Avenue in Elk River	C 3
US 12	8601-62N/62P	Howard Lake to Delano	C 4
MN 55	7312-24	Pope-Stearns County line in Brooten to Stearns-Kandiyohi County line	C 5
MN 55	8606-63	Meeker-Stearns County line to west of Poplar Avenue South in Annandale	C 6
MN 210	1807-29N/29P	In Ironton and Crosby	C 7
MN 371	1809-93	South of 50th Avenue Southwest to College Road in Baxter	C 8
MN 55	8607-63	Buffalo to Rockford	C 9
MN 371	1118-21	Backus to Hackensack	C 10
MN 47	3304-27	Ogilvie to Isle	C 11
Hwy 6	1802-53/53S	North of Orlander Road to south of Emily and north of Emily to Outing	C 12
Hwy 10	7102-127	Bridge over Lake Orono in Elk River	C 13
Hwy 10	8001-40	End of 4-Lane west of Wadena easterly to Oink Joint Rd	C 14
Hwy 10	7102-133	Clear Lake to Big Lake	C 15
Hwy 15	7303-50	TH 55 in Kimball to 66th Ave in St. Augusta	C 16
Hwy 24	7108-23	Bridge over Mississippi River in Clearwater	C 17
Hwy 25	0508-13/4910-2	Foley to south of Genola	C 18
Hwy 25	8605-49	7th Street to Catlin Street in Buffalo	C 19
Hwy 55	8606-60	Annandale to Buffalo	C 20
Hwy 4	7301-38	Kandiyohi/Stearns Co line to I-94 and Kandiyohi/Stearns Co line to Paynesville	C 21
Hwy 65	3003-47N/47P	Anoka/Isanti County line to end of 4-lane road north of Cambridge	C 22
Hwy 71	7318-39	Belgrade to Sauk Centre	C 23
Hwy 84	1110-14	Pine River to Hwy 200	C 24
Hwy 169	4812-86	Mille Lacs County Hwy 11 to Rum River Rest Area	C 25
Hwy 169	4812-84	Mille Lacs County Hwy 19 south of Onamia to Vineland	C 26
Hwy 238	7323-12/12S	Albany to Upsala	C 27
Hwy 371	1810-92	Nisswa to Jenkins	C 28
Hwy 371B	1814-06	Washington Street to Joseph Street in Brainerd	C 29
I-94	7380-239	Stearns County Hwy 75 to bridge over Sauk River	C 30
I-94	8680-173	Monticello to Clearwater	C 31
Hwy 10	0502-103	Benton CR 4 to railroad crossing near St. Germain St. in St. Cloud; and, on Hwy 15 from Hwy 10 for one mile south	C 32
Hwy 95	3006-36	Rum River Bridge in Cambridge	C 33
I-94	2780-66	Rogers to St. Michael	C 34

# PROJECT SUMMARY

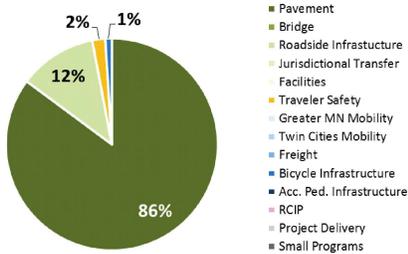
MN 6  
 Cass-Itasca County line to US 2 west of Cohasset  
 Bridge NA  
 State Project No. 3106-24  
 NA



## Primary Purpose

Performance-based need: Pavement Condition

## Investment Category



## Project Description

This project provides for the repair and replacement of the pavement on MN Hwy 6 from the Cass/Itasca County line to US Hwy 2 west of Cohasset. It also includes paving of the existing shoulder area.

## Recent Changes and Updates

This is a new project

## Project History

This project was selected to address deteriorating pavement conditions and to provide paved shoulders to improve safety and accommodate different mixes of traffic.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2017

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 7.5	\$ 7.5
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 1.0	\$ 1.0
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 8.5</b>	<b>\$ 8.5</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

The estimate is based on estimated quantities and average bid prices for similar projects.

## Project Risks

No significant risks are anticipated.

## Schedule

Environmental Approval Date: 2/22/2018  
 Municipal Consent Approval Date: Not Needed  
 Geometric Layout Approval Date: Not Needed  
 Construction Limits Established Date: 6/15/2018  
 Original Letting Date: 2/26/2021  
 Current Letting Date: 2/26/2021  
 Construction Season: 2021  
 Estimated Substantial Completion:



Minnesota Department of Transportation  
 District 3  
 7694 Industrial Boulevard  
 (218) 828-5700

District Engineer: Dan Anderson  
 Project Manager: Luke Wehseler

Revised Date: 12/15/2017

# PROJECT SUMMARY

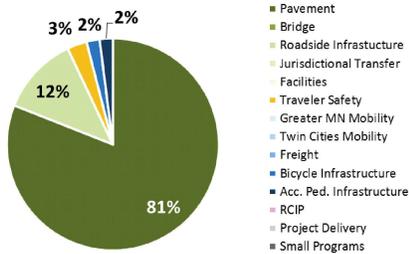
US 10  
 Xenia Avenue to Norfolk Avenue in Elk River  
 Bridge NA  
 State Project No. 7102-135N/135P  
 NA



## Primary Purpose

Performance-based need: Pavement Condition

## Investment Category



## Project Description

Reconstruction of the eastbound and westbound lanes of US Hwy 10 from Xenia Avenue to Norfolk Avenue in Elk River. Includes construction of separated paved multi-use bicycle-pedestrian trail to parallel highway and connect to existing trail.

## Recent Changes and Updates

This is a new project.

## Project History

Requires reconstruction to address grading, pavement, curb and gutter and storm sewer issues. District is coordinating with the City of Elk River to address the multi-use bicycle-pedestrian trail and Sherburne County to address possible intersection improvements at US 10 and County Road 1.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2017

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 8.8	\$ 8.8
Other Construction Elements:	\$ 0.9	\$ 0.9
Engineering:	\$ 1.8	\$ 1.8
Right of Way:	\$ 0.5	\$ 0.5
<b>Total:</b>	<b>\$ 12.0</b>	<b>\$ 12.0</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

The estimate is based on estimated quantities and average bid prices for similar projects.

## Project Risks

A potential risk is in costs due to maintenance of traffic during construction.

## Schedule

Environmental Approval Date: 6/7/2018  
 Municipal Consent Approval Date: 9/27/2018  
 Geometric Layout Approval Date: 4/18/2018  
 Construction Limits Established Date: 9/5/2018  
 Original Letting Date: 12/18/2020  
 Current Letting Date: 12/18/2020  
 Construction Season: 2021  
 Estimated Substantial Completion: Fall 2021



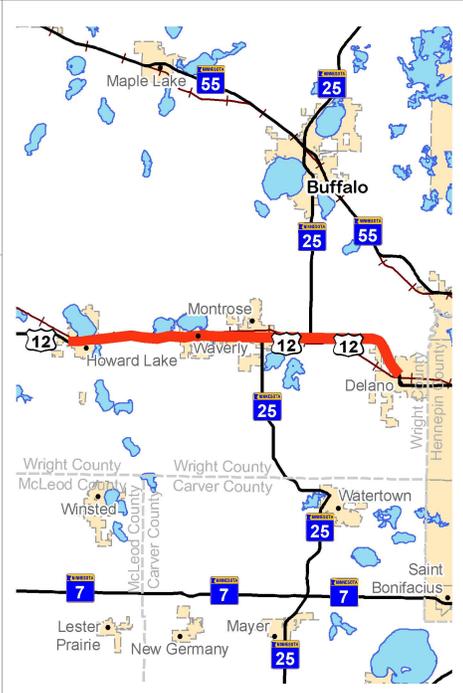
Minnesota Department of Transportation  
 District 3  
 7694 Industrial Boulevard  
 (218) 828-5700

District Engineer: Dan Anderson  
 Project Manager: Russell Fellbaum

Revised Date: 12/15/2017

# PROJECT SUMMARY

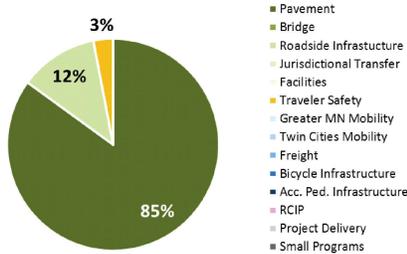
US 12  
 Howard Lake to Delano  
 Bridge NA  
 State Project No. 8601-62N/62P  
 NA



## Primary Purpose

Performance-based need: Pavement Condition

## Investment Category



## Project Description

This project provides for the resurfacing of the roadway and shoulders on US Hwy 12 from 13th Avenue in Howard Lake to north of Bridge Avenue in Delano. Upgrade to pedestrian facilities in Howard Lake, Waverly and Montrose is also planned.

## Recent Changes and Updates

This is a new project.

## Project History

The project was selected to address deteriorating pavement and provide for accessibility pedestrian facilities within the communities.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2017

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 7.7	\$ 7.7
Other Construction Elements:	\$ 0.8	\$ 0.8
Engineering:	\$ 1.5	\$ 1.5
Right of Way:	\$ 0.1	\$ 0.1
<b>Total:</b>	<b>\$ 10.1</b>	<b>\$ 10.1</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

The estimate is based on estimated quantities and average bid prices for similar projects.

## Project Risks

No significant risks are anticipated.

## Schedule

Environmental Approval Date: Pending  
 Municipal Consent Approval Date: Pending  
 Geometric Layout Approval Date: Pending  
 Construction Limits Established Date: Pending  
 Original Letting Date: 1/22/2021  
 Current Letting Date: 1/22/2021  
 Construction Season: 2021  
 Estimated Substantial Completion:



Minnesota Department of Transportation  
 District 3  
 7694 Industrial Boulevard  
 (218) 828-5700

District Engineer: Dan Anderson  
 Project Manager: Claudia Dumont

Revised Date: 12/15/2017

# PROJECT SUMMARY

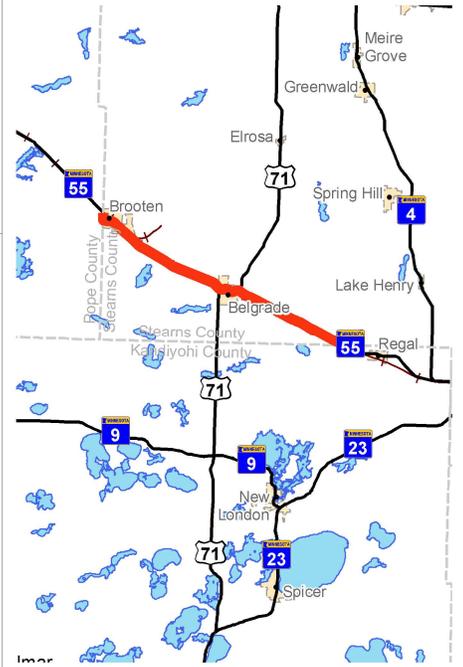
MN 55

Pope-Stearns County line in Broten to Stearns-Kandiyohi County line

Bridge NA

State Project No. 7312-24

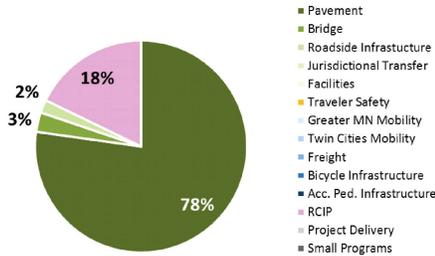
NA



## Primary Purpose

Performance-based need: Pavement Condition

## Investment Category



## Project Description

This project provides for the resurfacing of the roadway and shoulders on MN Hwy 55 from the Pope/Stearns County line in Broten to the Stearns/Kandiyohi County line.

## Recent Changes and Updates

This is a new project.

## Project History

The project was selected to address deteriorating pavement conditions.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2017

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 6.3	\$ 6.3
Other Construction Elements:	\$ 0.6	\$ 0.6
Engineering:	\$ 1.3	\$ 1.3
Right of Way:	\$ 0.1	\$ 0.1
<b>Total:</b>	<b>\$ 8.3</b>	<b>\$ 8.3</b>

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

## Key Cost Estimate Assumptions

The estimate is based on estimated quantities and average bid prices for similar projects.

## Project Risks

No significant risks are anticipated.

## Schedule

Environmental Approval Date: 5/25/2018  
 Municipal Consent Approval Date: Not Needed  
 Geometric Layout Approval Date: 5/2/2018  
 Construction Limits Established Date: 9/5/2018  
 Original Letting Date: 12/18/2020  
 Current Letting Date: 12/18/2020  
 Construction Season: 2021  
 Estimated Substantial Completion: Fall 2021



Minnesota Department of Transportation  
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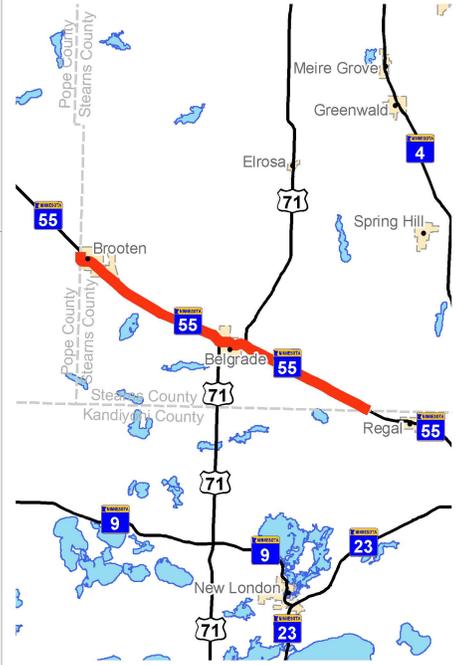
District Engineer: Dan Anderson  
 Project Manager: Russell Fellbaum

Revised Date: 12/15/2017

# PROJECT SUMMARY

MN 55

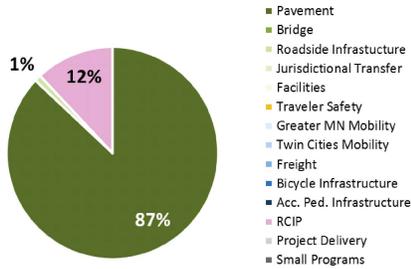
Meeker-Stearns County line to west of Poplar Avenue South in Annandale  
 Bridge NA  
 State Project No. 8606-63  
 NA



## Primary Purpose

Performance-based need: Pavement Condition

## Investment Category



## Project Description

This project provides for the resurfacing of the roadway and shoulders on MN Hwy 55 from the Meeker/Stearns County line to Poplar Avenue in Annandale. Working with the City of Annandale to include utility replacements.

## Recent Changes and Updates

This is a new project.

## Project History

The project was selected to address deteriorating pavement conditions along with hydraulic and guardrail improvements.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2017

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 6.0	\$ 6.0
Other Construction Elements:	\$ 0.6	\$ 0.6
Engineering:	\$ 1.2	\$ 1.2
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 7.8</b>	<b>\$ 7.8</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

The estimate is based on estimated quantities and average bid prices for similar projects.

## Project Risks

No significant risks are anticipated.

## Schedule

Environmental Approval Date: 3/16/2018  
 Municipal Consent Approval Date: Not Needed  
 Geometric Layout Approval Date: 2/21/2018  
 Construction Limits Established Date: 9/5/2018  
 Original Letting Date: 7/24/2020  
 Current Letting Date: 7/24/2020  
 Construction Season: 2020  
 Estimated Substantial Completion: 2020



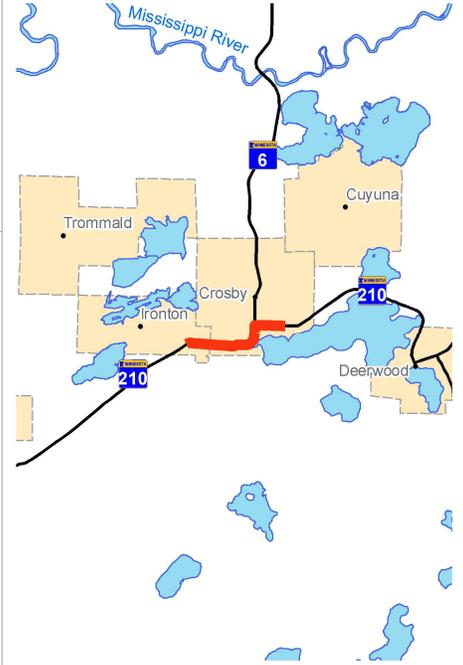
Minnesota Department of Transportation  
 District 3  
 7694 Industrial Boulevard  
 (218) 828-5700

District Engineer: Dan Anderson  
 Project Manager: Russell Fellbaum

Revised Date: 12/15/2017

# PROJECT SUMMARY

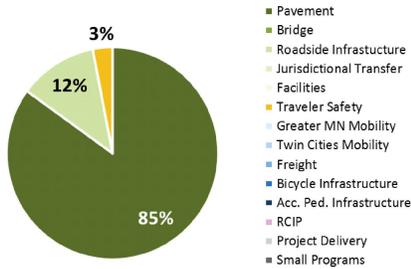
MN 210  
 In Ironton and Crosby  
 Bridge NA  
 State Project No. 1807-29N/29P  
 NA



## Primary Purpose

Performance-based need: Pavement Condition

## Investment Category



## Project Description

Urban reconstruction from 2nd Street Southwest to east of 3rd Avenue Northeast in Crosby and bituminous resurfacing from west of 7th Avenue in Ironton to 2nd Street Southwest in Crosby, including replacement of sidewalks.

## Recent Changes and Updates

This is a new project.

## Project History

The pavement has not been rehabilitated since it was reconstructed under S.P. 1806-57 for Ironton and 1806-58 for Crosby in 1989. The pavement is deteriorating and is in need of resurfacing to maintain an acceptable ride quality on this section of roadway. The need for the reconstruction portion of the project is not the typical roadway need, but rather is related to adjusting curb lines to meet the requirements of the American Disabilities Act on the existing sidewalk facilities. The project was selected to address deteriorating pavement and accessibility needs on the pedestrian infrastructure in Crosby and Ironton.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2017

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 5.0	\$ 5.0
Other Construction Elements:	\$ 0.5	\$ 0.5
Engineering:	\$ 1.0	\$ 1.0
Right of Way:	\$ 0.1	\$ 0.1
<b>Total:</b>	<b>\$ 6.6</b>	<b>\$ 6.6</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

The estimate is based on estimated quantities and average bid prices for similar projects.

## Project Risks

No significant risks are anticipated.

## Schedule

Environmental Approval Date: 3/6/2018  
 Municipal Consent Approval Date: 6/25/2018  
 Geometric Layout Approval Date: 1/12/2018  
 Construction Limits Established Date: 3/28/2018  
 Original Letting Date: 10/23/2020  
 Current Letting Date: 10/23/2020  
 Construction Season: 2021  
 Estimated Substantial Completion: Fall 2021



Minnesota Department of Transportation  
 District 3  
 7694 Industrial Boulevard  
 (218) 828-5700

District Engineer: Dan Anderson  
 Project Manager: Eric Schiller

Revised Date: 12/15/2017

## PROJECT SUMMARY

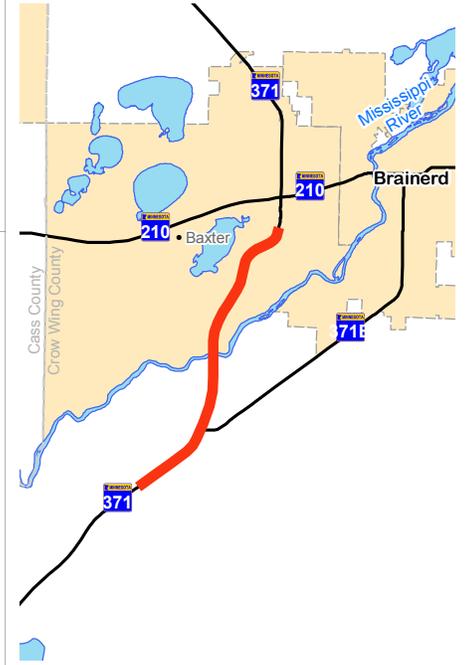
MN 371

South of 50th Avenue Southwest to College Road in Baxter

Bridge NA

State Project No. 1809-93

NA



### Primary Purpose

Performance-based need: Pavement Condition

### Investment Category

\*This project was designed and scoped before the current highway investment plan MnSHIP was developed, which breaks projects into investment categories.

### Project Description

This project provides for a longer term replacement and resurfacing of the pavement in both the northbound and southbound lanes of MN Hwy 371 from 50th Avenue Southwest near the Safari Zoo north to College Road in Baxter.

### Recent Changes and Updates

This project was advanced from 2024 in District 3's 10-year Capital Highway Investment Plan with Chapter 3 bond funding provided by the 2017 Legislature. New funding made it possible to pursue a longer term fix to more adequately address pavement needs along this section of roadway.

### Project History

The project was selected to address deteriorating pavement conditions.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2017

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 4.0	\$ 4.2
Other Construction Elements:	\$ 0.3	\$ 0.3
Engineering:	\$ 0.6	\$ 0.4
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 4.9</b>	<b>\$ 4.9</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

The estimate is based on estimated quantities and average bid prices for similar projects.

### Project Risks

No significant risks are anticipated.

### Schedule

Environmental Approval Date: 10/19/2017  
 Municipal Consent Approval Date: Not Needed  
 Geometric Layout Approval Date: Not Needed  
 Construction Limits Established Date: Not Needed  
 Original Letting Date: 5/18/2018  
 Current Letting Date: 5/18/2018  
 Construction Season: 2018  
 Estimated Substantial Completion: Fall 2018



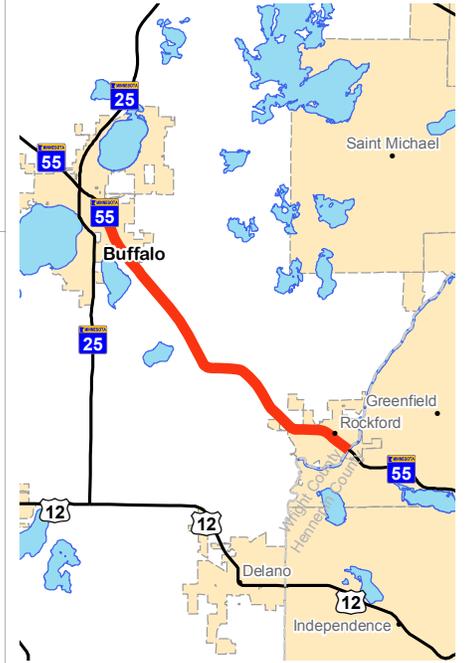
Minnesota Department of Transportation  
 District 3  
 7694 Industrial Boulevard  
 (218) 828-5700

**District Engineer:** Dan Anderson  
**Project Manager:** Matt Indihar

**Revised Date:** 12/15/2017

# PROJECT SUMMARY

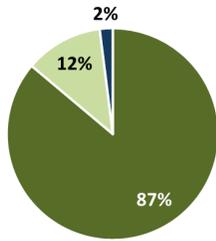
MN 55  
Buffalo to Rockford  
Bridge NA  
State Project No. 8607-63  
NA



## Primary Purpose

Performance-based need: Pavement Condition

## Investment Category



- Pavement
- Bridge
- Roadside Infrastructure
- Jurisdictional Transfer
- Facilities
- Traveler Safety
- Greater MN Mobility
- Twin Cities Mobility
- Freight
- Bicycle Infrastructure
- Acc. Ped. Infrastructure
- RCIP
- Project Delivery
- Small Programs

## Project Description

This project provides for a longer term repair and replacement of the pavement on MN Hwy 55 from Division Street in Buffalo to Wright/Hennepin County Line (Crow River Bridge) in Rockford.

## Recent Changes and Updates

This is a new project that was previously a minor resurfacing candidate. The scope of work for this project was modified to a more substantial, longer-term improvement with additional Chapter 3 bond funding provided by the 2017 Legislature.

## Project History

The project was selected to address deteriorating pavement conditions. Originally scheduled for mill and overlay, this project was upscoped to a full depth reclamation from Buffalo to west of Rockford with the remainder of the project staying a mill and overlay. Hydraulic and guardrail improvements will also be addressed.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2013 & 2017 (Upscoped)

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 4.0	\$ 4.0
Other Construction Elements:	\$ 0.3	\$ 0.3
Engineering:	\$ 0.5	\$ 0.5
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 4.8</b>	<b>\$ 4.8</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

The estimate is based on estimated quantities and average bid prices for similar projects.

## Project Risks

No significant risks are anticipated.

## Schedule

Environmental Approval Date: 11/15/2017  
Municipal Consent Approval Date: Not Needed  
Geometric Layout Approval Date: Not Needed  
Construction Limits Established Date: 6/26/2017  
Original Letting Date: 4/27/2018  
Current Letting Date: 4/27/2018  
Construction Season: 2018  
Estimated Substantial Completion: 2018



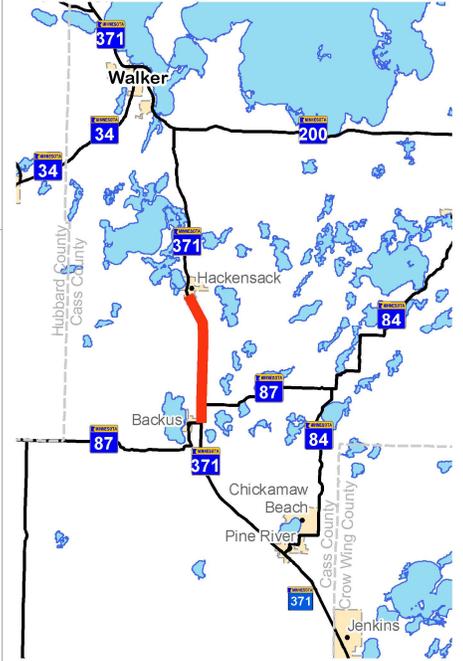
Minnesota Department of Transportation  
District 3  
7694 Industrial Boulevard  
(218) 828-5700

**District Engineer:** Dan Anderson  
**Project Manager:** Russell Fellbaum

**Revised Date:** 12/15/2017

# PROJECT SUMMARY

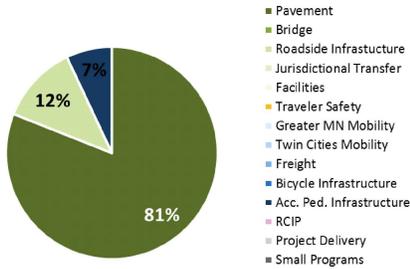
MN 371  
 Backus to Hackensack  
 Bridge NA  
 State Project No. 1118-21  
 NA



## Primary Purpose

Performance-based need: Pavement Condition

## Investment Category



## Project Description

This project provides for a longer term repair and replacement of the pavement on MN Hwy 317 from MN 87 in Backus to Cass County Hwy 40 in Hackensack.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2017

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 3.6	\$ 3.6
Other Construction Elements:	\$ 0.2	\$ 0.2
Engineering:	\$ 0.4	\$ 0.4
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 4.2</b>	<b>\$ 4.2</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Recent Changes and Updates

This is a new project that was advanced from year 2021 of District 3's 10-year Capital Highway Investment Plan with help from Chapter 3 funding provided by the 2017 Legislature. New funding made it possible to not only advance this project but pursue a longer term fix to more adequately address pavement needs along this section of roadway.

## Project History

The project was selected to address deteriorating pavement conditions.

## Key Cost Estimate Assumptions

The estimate is based on estimated quantities and average bid prices for similar projects.

## Project Risks

No significant risks are anticipated.

## Schedule

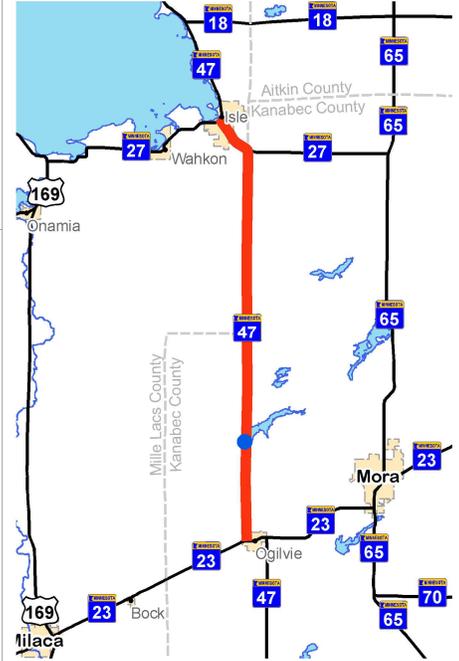
Environmental Approval Date: 2/15/2017  
 Municipal Consent Approval Date: Not Needed  
 Geometric Layout Approval Date: Not Needed  
 Construction Limits Established Date: Not Needed  
 Original Letting Date: 5/19/2018  
 Current Letting Date: 5/18/2018  
 Construction Season: 2018  
 Estimated Substantial Completion: Fall 2018



Minnesota Department of Transportation  
 District 3  
 7694 Industrial Boulevard  
 (218) 828-5700  
 District Engineer: Dan Anderson  
 Project Manager: Matt Indihar  
 Revised Date: 12/15/2017

# PROJECT SUMMARY

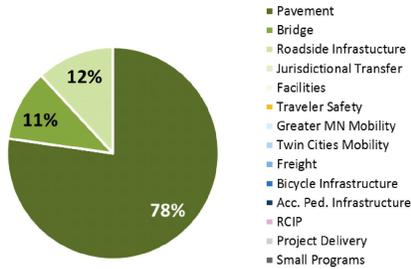
MN 47  
 Ogilvie to Isle  
 Bridge 6828  
 State Project No. 3304-27  
 NA



## Primary Purpose

Performance-based need: Pavement Condition

## Investment Category



## Project Description

This project provides for the resurfacing of the roadway and shoulders on MN Hwy 47 from MN Hwy 23 in Ogilvie to MN Hwy 27 in Isle. Includes replacement of bridge over a stream approximately 5 miles north of Ogilvie.

## Recent Changes and Updates

This is new project.

## Project History

The project was selected to address deteriorating pavement conditions and low sufficiency rating of bridge structure within the project limits.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2017

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 6.1	\$ 6.1
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 1.0	\$ 1.0
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 7.1</b>	<b>\$ 7.1</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

The estimate is based on estimated quantities and average bid prices for similar projects.

## Project Risks

No significant risks are anticipated.

## Schedule

Environmental Approval Date: 3/2/2018  
 Municipal Consent Approval Date: Not Needed  
 Geometric Layout Approval Date: Not Needed  
 Construction Limits Established Date: 1/2/2018  
 Original Letting Date: 5/17/2019  
 Current Letting Date: 5/17/2019  
 Construction Season: 2019  
 Estimated Substantial Completion:



Minnesota Department of Transportation  
 District 3  
 7694 Industrial Boulevard  
 (218) 828-5700

District Engineer: Dan Anderson  
 Project Manager: Luke Wehsele

Revised Date: 12/15/2017

## PROJECT SUMMARY

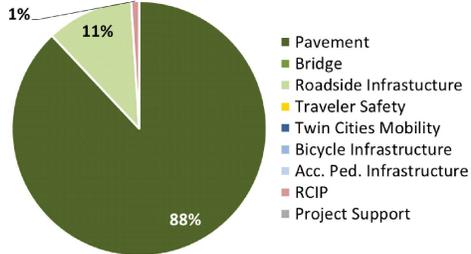
Hwy 6  
North of Orlander Road to south of Emily and north of Emily to Outing  
Bridge NA  
State Project No. 1802-53/53S  
NA



### Primary Purpose

Performance-based Need: Pavement

### Investment Category



### Project Description

This project provides for resurfacing from just north of Orlander Road, which is north of Crosby, to a bridge (#11005) in Outing. The project excludes a road segment in Emily.

### Recent Changes and Updates

Low oil prices in 2017 resulted in low bid prices. The district updated the construction cost estimates in the program to reflect the lower overall projected bituminous prices. This resulted in a lower estimated cost for this project.

### Project History

The project was selected to address deteriorating pavement.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2016

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 4.8	\$ 4.5
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 1.0	\$ 0.8
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 5.8</b>	<b>\$ 5.3</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

The estimate is based on estimated quantities and average bid prices for similar projects.

### Project Risks

No significant risks are anticipated.

### Schedule

Environmental Approval Date: 11/7/2017  
Municipal Consent Approval Date: Not Required  
Geometric Layout Approval Date: Not Required  
Construction Limits Established Date: 12/18/2017  
Original Letting Date: 1/25/2019  
Current Letting Date: 1/25/2019  
Construction Season: 2019  
Estimated Substantial Completion: Summer 2019



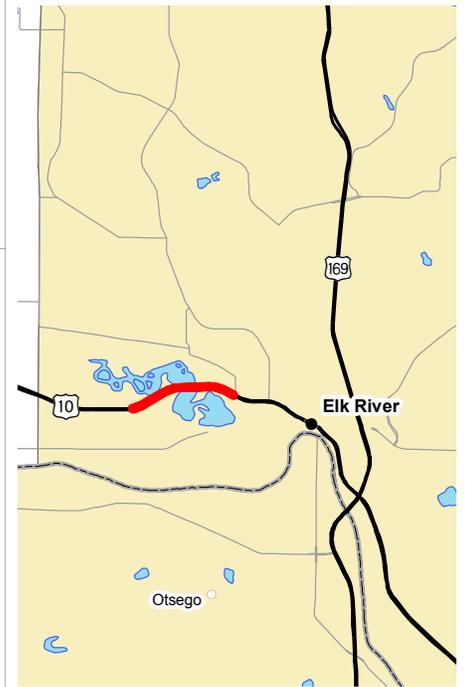
Minnesota Department of Transportation  
District 3  
7694 Industrial Boulevard  
(218) 828-5700

District Engineer: Dan Anderson  
Project Manager: Luke Wehsele

Revised Date: 12/15/2016

## PROJECT SUMMARY

Hwy 10  
 Bridge over Lake Orono in Elk River  
 Bridge 5955  
 State Project No. 7102-127  
 NA



### Primary Purpose

Performance-based Need: Bridge Condition

### Investment Category

\*This project was designed and scoped before the current highway investment plan MnSHIP was developed, which breaks projects into investment categories.

### Project Description

This project replaces the bridge on US 10 over the Elk River (Lake Orono) in Elk River. Planned work also includes the reconstruction of the highway from Joplin Street to Xenia Avenue.

### Recent Changes and Updates

This project has been let and is presently under construction. The project was let for \$9.8 million, which was less than the \$13.2 million previous estimated construction cost. Savings were the result of lower than anticipated bituminous prices by the contractor.

### Project History

This bridge is District 3's last structurally deficient bridge. Addressing these deficiencies will require full replacement of the bridge. The project cost has been adjusted due to bridge approach work and highway realignment associated with the replacement of the bridge. \$10 million in state bonding is provided to this project. The city of Elk River recently was awarded funding for bike trail improvements to be coordinated with this project. The project was advanced from FY 2018 to FY 2017 due to the availability of state bond proceeds.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2014

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 10.0	\$ 9.8
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 2.0	\$ 2.0
Right of Way:	\$ 0.1	\$ 0.0
<b>Total:</b>	<b>\$ 12.1</b>	<b>\$ 10.8</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

The baseline estimate and current estimate values are based on estimated quantities of average bid prices. Additional concrete pavement replacement was added, which is reflected in the current estimate.

### Project Risks

If the project disrupts traffic along the travel corridor, the district may have to take steps to improve traffic flow. Timely utility relocations are needed to avoid impacts to the schedule.

### Schedule

Environmental Approval Date: 1/19/17  
 Municipal Consent Approval Date: Not Needed  
 Geometric Layout Approval Date: 8/03/2015  
 Construction Limits Established Date: 2016  
 Original Letting Date: 2/25/2017  
 Current Letting Date: 5/19/2017  
 Construction Season: 2017 & 2018  
 Estimated Substantial Completion: Fall 2018



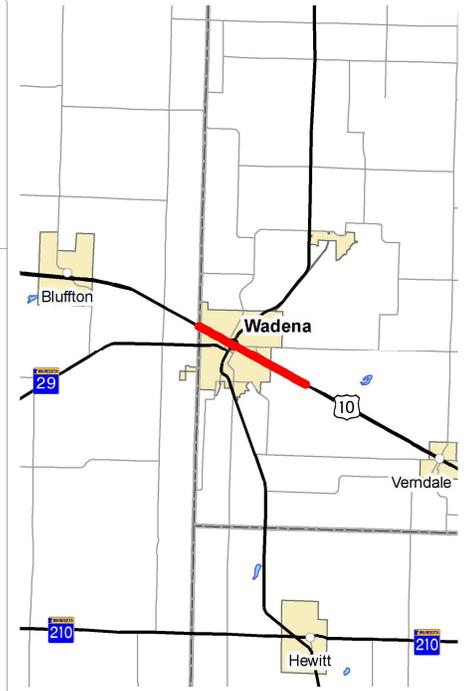
Minnesota Department of Transportation  
 District 3  
 7694 Industrial Boulevard  
 (218) 828-5700

**District Engineer:** Dan Anderson  
**Project Manager:** Claudia Dumont

**Revised Date:** 12/15/2016

# PROJECT SUMMARY

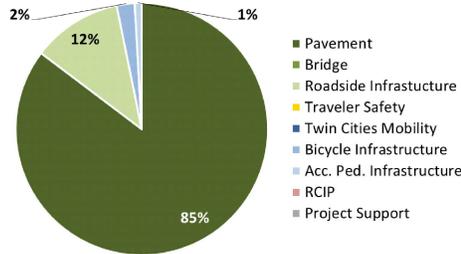
Hwy 10  
 End of 4-Lane west of Wadena easterly to Oink Joint Rd  
 Bridge NA  
 State Project No. 8001-40  
 NA



## Primary Purpose

Performance-based Need: Pavement

## Investment Category



## Project Description

The project is for resurfacing of the rural segments of Hwy 10 east and west of Wadena and for reconstruction of the urban section from 3rd St NW to 2nd St NE within the city limits of Wadena. Work includes replacement of curb, gutter, sidewalks and railroad signal upgrades.

## Recent Changes and Updates

This project was delayed one year due to complications in obtaining environmental clearance for right of way needed from the railroad.

## Project History

Several pavement rehabilitation projects were done on this roadway. The pavement has reached the end of its expected life in the urban area of Wadena and requires full reconstruction. The rural segments require milling and filling.

Funding for this project is provided jointly by District 3 and District 4. The geometric layout was approved. The project received municipal consent. The environmental document was approved. Road plans are underway, as is the right of way acquisition.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2014

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 9.6	\$ 9.6
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 1.9	\$ 1.9
Right of Way:	\$ 5.0	\$ 5.0
<b>Total:</b>	<b>\$ 16.5</b>	<b>\$ 16.5</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

The baseline estimate is based on estimated quantities and average bid prices. The current estimate is based on bids and design changes that reduced costs. Project includes work in District 4.

## Project Risks

The lack of detour routes may complicate the replacement of storm sewer.

## Schedule

Environmental Approval Date: 09/08/2016  
 Municipal Consent Approval Date: 01/12/2016  
 Geometric Layout Approval Date: 11/16/2015  
 Construction Limits Established Date: Pending  
 Original Letting Date: 12/15/2017  
 Current Letting Date: 12/14/2018  
 Construction Season: 2019  
 Estimated Substantial Completion: Fall 2019



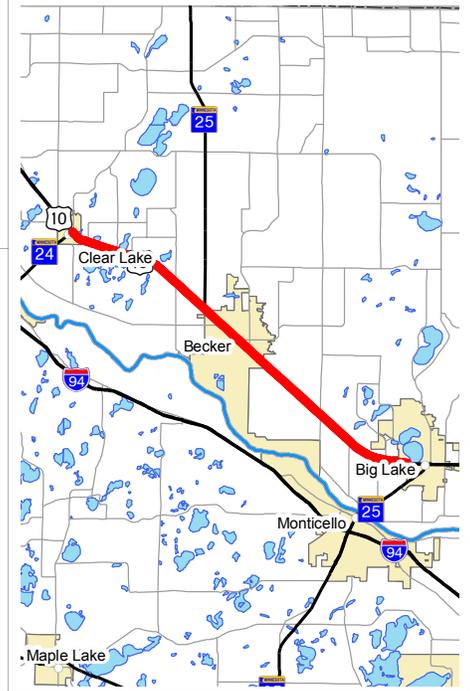
Minnesota Department of Transportation  
 District 3  
 7694 Industrial Boulevard  
 (218) 828-5700

District Engineer: Dan Anderson  
 Project Manager: Claudia Dumont

Revised Date: 12/15/2016

# PROJECT SUMMARY

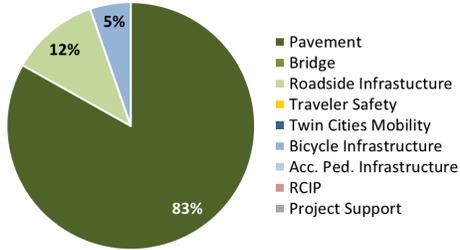
Hwy 10  
 Clear Lake to Big Lake  
 Bridge NA  
 State Project No. 7102-133  
 NA



## Primary Purpose

Performance-based Need: Pavement

## Investment Category



## Project Description

The project is to repair the pavement with a full depth reclamation of the eastbound direction of the 4-lane expressway between Clear Lake and Big Lake. A reduced conflict intersection will be constructed to improve safety at Sherburne Co. Hwy 23 in Becker with the project.

## Recent Changes and Updates

This project was originally scoped and programmed as a resurfacing project. Due to low bid prices by contractors in 2017, the district was able to apply the savings to pursue a longer-term fix. The new scope calls for reclaiming and replacing of the pavement resulting in an increased project cost.

## Project History

This project was selected to address deteriorating pavement. District coordinated with City of Becker and Sherburne County to address safety concerns and review design alternatives for the Sherburne Co. Hwy 23 intersection. Proposed improvements involve a revision of the intersection to be reflected in the design plans.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2015

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 5.7	\$ 9.4
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 1.1	\$ 1.9
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 6.8</b>	<b>\$ 11.3</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

The baseline estimate is based on estimated quantities and average bid prices.

## Project Risks

There will be a need to determine if additional right of way will be needed at Sherburne Co. Hwy 23 and other planned right-turn lane extensions.

## Schedule

Environmental Approval Date: 6/14/2017  
 Municipal Consent Approval Date: Not Needed  
 Geometric Layout Approval Date: 08/26/16  
 Construction Limits Established Date: 11/11/16  
 Original Letting Date: 11/16/2018  
 Current Letting Date: 3/23/2018  
 Construction Season: 2018  
 Estimated Substantial Completion: 2018



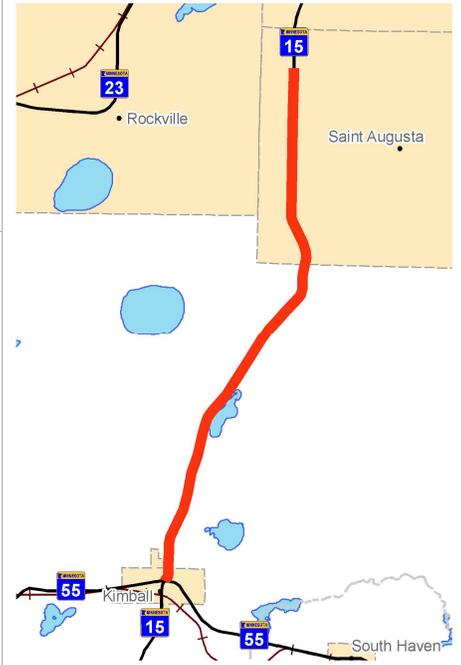
Minnesota Department of Transportation  
 District 3  
 7694 Industrial Boulevard  
 (218) 828-5700

**District Engineer:** Dan Anderson  
**Project Manager:** Eric Schiller

**Revised Date:** 12/15/2016

## PROJECT SUMMARY

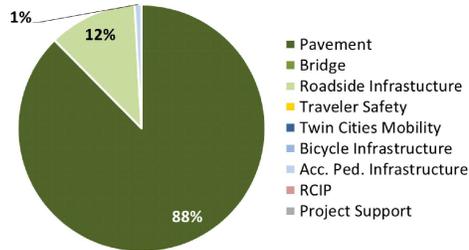
Hwy 15  
 TH 55 in Kimball to 66th Ave in St. Augusta  
 Bridge NA  
 State Project No. 7303-50  
 NA



### Primary Purpose

Performance-based Need: Pavement condition

### Investment Category



### Project Description

This project is to repair pavement with a full depth reclamation and include hydraulic repairs from the junction of MN Hwy 55 in Kimball to 66th Avenue in St. Augusta.

### Recent Changes and Updates

The construction limits for this project originally extended to south to the CP railroad tracks in Kimball resulting in a lower estimated current cost. The limits were modified to allow time to work with the community in addressing its sidewalk and accessibility needs along Hwy 55. A new project has been added into year 2020 of the District's construction program that accomplishes the work within the urban area of Kimball. The splitting of this project resulted in an adjustment in the current estimate.

### Project History

The project was selected to address deteriorating pavement.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2016

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 6.2	\$ 5.5
Other Construction Elements:	\$ 0.0	\$ 0
Engineering:	\$ 1.2	\$ 1.1
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 7.4</b>	<b>\$ 6.6</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

The estimate is based on estimated quantities and average bid prices for similar projects.

### Project Risks

No significant risks are anticipated.

### Schedule

Environmental Approval Date: 10/31/2017  
 Municipal Consent Approval Date: Not Needed  
 Geometric Layout Approval Date: Not Needed  
 Construction Limits Established Date: 2/6/2018  
 Original Letting Date: 2/28/2020  
 Current Letting Date: 12/21/2018  
 Construction Season: 2019  
 Estimated Substantial Completion: 2019



Minnesota Department of Transportation  
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 1000 Hwy 10 W  
 (218) 846-3600

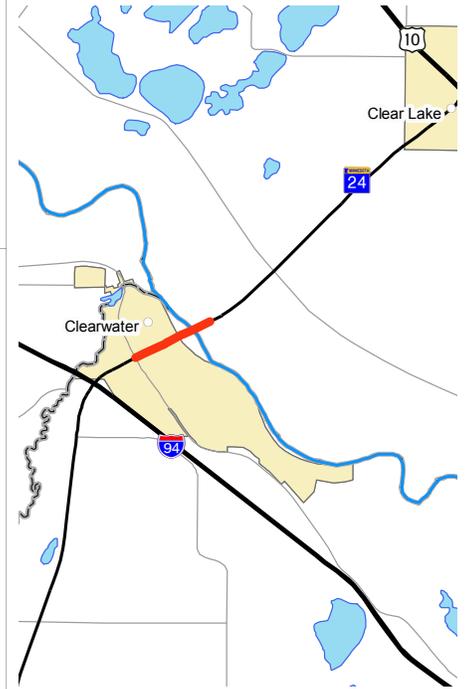
District Engineer: Dan Anderson  
 Project Manager: Russell Fellbaum

Revised Date: 12/15/2016

## PROJECT SUMMARY

Hwy 24  
 Bridge over Mississippi River in Clearwater  
 Bridge 6557  
 State Project No. 7108-23

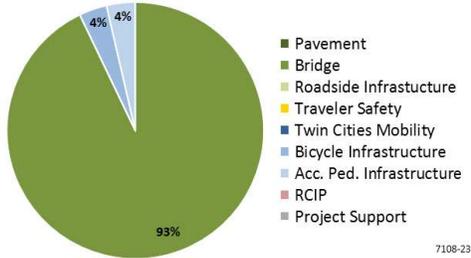
NA  
**Substantially Complete**



### Primary Purpose

Performance-based Need: Bridge Condition

### Investment Category



### Project Description

The project replaces the bridge over the Mississippi River at Clearwater.

### Recent Changes and Updates

Construction of the new bridge is completed and the new bridge is open to traffic. Right of way estimates were considerably less than anticipated as it only entailed demolition of two buildings. The demolition and removal of the old bridge along with other minor work will be completed in 2018.

### Project History

The bridge deck and girders required replacement. The decision was made to construct a new bridge parallel to the existing structure to minimize traffic impacts. The project was let in May 2015. The bid amount was considerably lower than the engineer's estimate due to a generous construction schedule. The extra funding available due to the lower bid/award was shifted to other construction projects. Demolition of the existing bridge will be completed in 2018, after traffic is switched to the new bridge.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2012

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 20.0	\$ 17.4
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 4.4	\$ 3.5
Right of Way:	\$ 5.0	\$ 0.5
<b>Total:</b>	<b>\$ 29.4</b>	<b>\$ 21.4</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

The baseline estimate is based on estimated quantities and average bid prices for similar projects. The current estimate is based on the actual bid amount.

### Project Risks

One consideration is in maintaining traffic, primarily summer recreation traffic, during construction. Since existing bridge will remain in place during construction of new bridge, the risk is largely mitigated.

### Schedule

Environmental Approval Date: 12/22/2014  
 Municipal Consent Approval Date: 9/15/14  
 Geometric Layout Approval Date: 5/05/2014  
 Construction Limits Established Date: 9/15/2014  
 Original Letting Date: 5/15/2015  
 Current Letting Date: 5/15/2015  
 Construction Season: 2015-2018  
 Estimated Substantial Completion: Fall 2017



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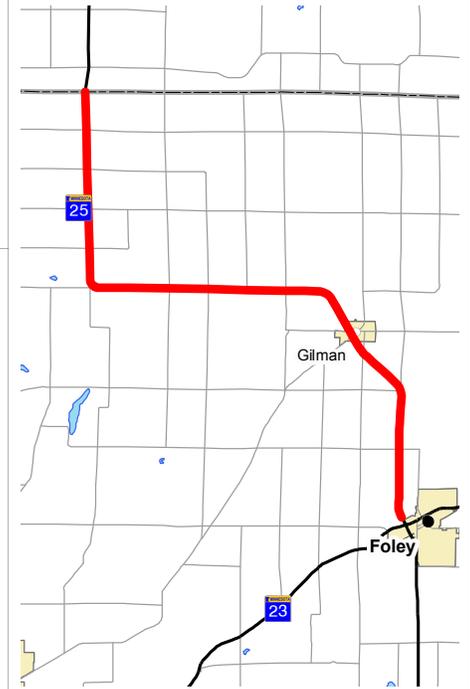
**District Engineer:** Dan Anderson  
**Project Manager:** Claudia Dumont

**Revised Date:** 12/15/2016

## PROJECT SUMMARY

Hwy 25  
 Foley to south of Genola  
 Bridge NA  
 State Project No. 0508-13/4910-29

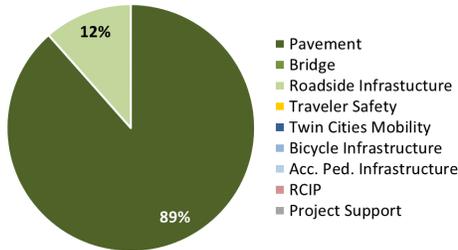
**Substantially Complete**



### Primary Purpose

Performance-based Need: Pavement

### Investment Category



### Project Description

The current project combined two resurfacing projects from Foley to the Benton/Morrison County line and from the Benton/Morrison County line to south of Genola. The project includes accessibility, hydraulic and safety improvements in addition to the pavement rehabilitation.

### Recent Changes and Updates

The project was let for \$5.2 million considerably less than the \$9.5 million that was previously the current estimated construction cost. Existing shoulder width allowed for paving the shoulder and the roadway in a single pass, allowing for much higher production rates. This, in part, resulted in favorable bid results for the project. Overall, the district has been seeing favorable bid results on bituminous. The roadway will be open to traffic in fall 2017.

### Project History

Deteriorating pavement condition requires resurfacing of this segment. This project was advanced one fiscal year due to savings in the program. A new cost estimate was prepared using updated bid prices for this kind of work. Letting date was moved up to allow for earlier construction. The project was advanced one fiscal year and tied to another mill and overlay project on MN Hwy 25 (SP 4910-29). The project is of similar work type and adjoins SP 4910-29. Costs reflect both projects in the current estimate.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2014

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 6.6	\$ 5.2
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 1.3	\$ 1.9
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 7.9</b>	<b>\$ 7.1</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

The estimate is based on construction cost per mile of similar projects, adjusted for inflation.

### Project Risks

No significant risks are anticipated.

### Schedule

Environmental Approval Date: 09/13/16  
 Municipal Consent Approval Date: Not Required  
 Geometric Layout Approval Date: 04/06/15  
 Construction Limits Established Date: 01/15/16  
 Original Letting Date: 10/27/2017  
 Current Letting Date: 5/19/2017  
 Construction Season: 2017  
 Estimated Substantial Completion: Fall 2017



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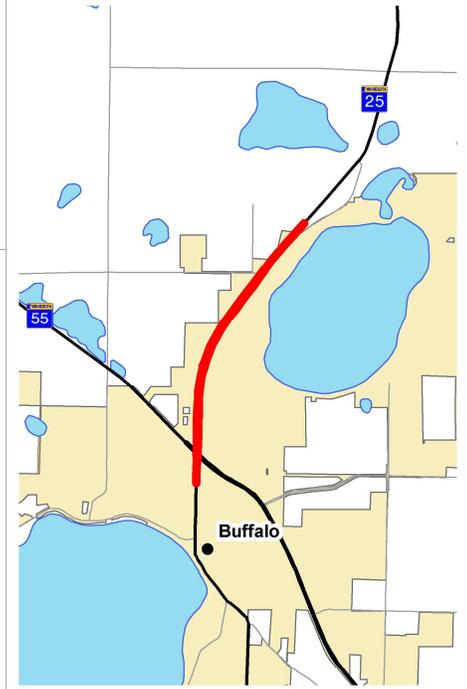
**District Engineer:** Dan Anderson  
**Project Manager:** Eric Schiller

**Revised Date:** 12/15/2016

## PROJECT SUMMARY

Hwy 25  
7th Street to Catlin Street in Buffalo  
Bridge NA  
State Project No. 8605-49

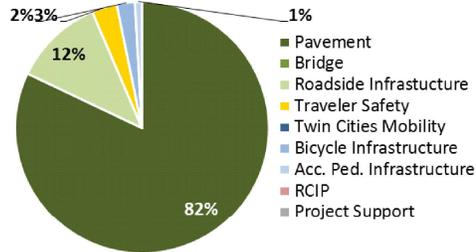
Substantially Complete



### Primary Purpose

Performance-based Need: Pavement Condition and Safety Improvements

### Investment Category



### Project Description

This project is for reconstruction from Hwy 55 to Catlin St. in Buffalo, including traffic signal upgrades and widening to accommodate four lanes.

### Recent Changes and Updates

Project was completed in 2016

### Project History

Funding for the project was previously delayed one fiscal year to accommodate changes to the construction program. Local participation for signal upgrades added to the cost. The letting date changed to allow for the completion of the municipal utilities plan. This project was previously adjusted to accommodate local urban reconstruction of Hwy 25 through the downtown area that was funded in part by Corridor Investment Management System program.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2012

	Baseline Est.	Current Est.
Construction Letting:	\$ 5.0	\$ 6.7
Other Construction Elements:	\$ 0.0	\$ 0.7
Engineering:	\$ 1.9	\$ 1.1
Right of Way:	\$ 0.0	\$ 0.5
<b>Total:</b>	<b>\$ 6.9</b>	<b>\$ 9.0</b>

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

### Key Cost Estimate Assumptions

The baseline estimate is based on estimated quantities and average bid prices. The current estimate is based on actual bid prices and letting of this project, which includes estimated local costs totaling \$1.2 million.

### Project Risks

Cooperation issues with utility relocation has caused significant delay and added cost to the project. The utility response will cause the project to carry over into 2017. All costs associated with this delay are being tracked and will be assessed back to the utility.

### Schedule

Environmental Approval Date: 8/24/2015  
Municipal Consent Approval Date: 4/20/2015  
Geometric Layout Approval Date: 8/20/2013  
Construction Limits Established Date: 9/8/2014  
Original Letting Date: 3/28/2014  
Current Letting Date: 1/29/2016  
Construction Season: 2016  
Estimated Substantial Completion: FALL 2016



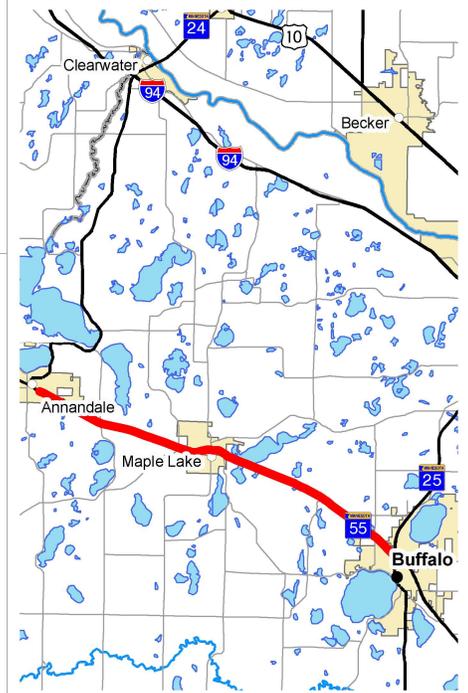
Minnesota Department of Transportation  
District 3  
7694 Industrial Boulevard  
(218) 828-5700

District Engineer: Dan Anderson  
Project Manager: Claudia Dumont

Revised Date: 12/15/2016

## PROJECT SUMMARY

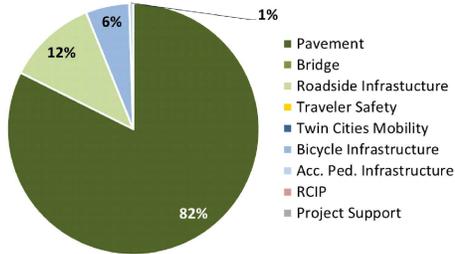
Hwy 55  
Annandale to Buffalo  
Bridge NA  
State Project No. 8606-60  
NA



### Primary Purpose

Performance-based Need: Pavement

### Investment Category



### Project Description

This project is for resurfacing from Poplar Ave. in Annandale to the Hwy 25 junction in Buffalo, and includes paving the shoulders, updating guardrails and hydraulic repairs.

### Recent Changes and Updates

No changes to report and project development is on track.

### Project History

The project was selected to address deteriorating pavement. There was a minor letting date change due to a correction in the letting schedule.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2015

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 5.6	\$ 5.6
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 1.1	\$ 1.1
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 6.7</b>	<b>\$ 6.7</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

The baseline estimate used estimated quantities and average bid prices.

### Project Risks

This is a routine rural resurfacing project, so no significant risks are anticipated.

### Schedule

Environmental Approval Date: 11/22/2017  
Municipal Consent Approval Date: Not Needed  
Geometric Layout Approval Date: Not Needed  
Construction Limits Established Date: Not Started  
Original Letting Date: 10/19/2018  
Current Letting Date: 10/26/2018  
Construction Season: 2019  
Estimated Substantial Completion: 2019



Minnesota Department of Transportation  
District 3  
7694 Industrial Boulevard  
(218) 828-5700

District Engineer: Dan Anderson  
Project Manager: Russell Fellbaum

Revised Date: 12/15/2016

## PROJECT SUMMARY

Hwy 4

Kandiyohi/Stearns Co line to I-94 and Kandiyohi/Stearns Co line to Paynesville

Bridge NA

State Project No. 7301-38

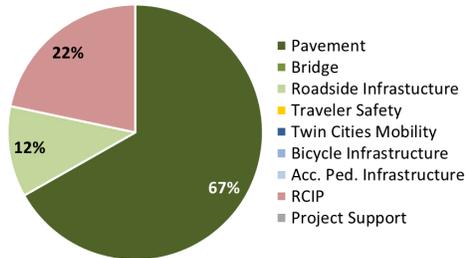
NA



### Primary Purpose

Performance-based Need: Pavement

### Investment Category



### Project Description

The project encompasses road resurfacing in two locations: on Hwy 4 from the junction with Hwy 55 to I-94 and on Hwy 55 from Kandiyohi/Stearns Co line to east limits of Paynesville.

### Recent Changes and Updates

No changes to report and project development is on track.

### Project History

The project was selected to address deteriorating pavement. TH 4 was last resurfaced in 1996 and TH 55 was last resurfaced in 1997. Both corridors are due for resurfacing and minor hydraulic repairs.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2016

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 5.7	\$ 5.7
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 1.1	\$ 1.1
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 6.8</b>	<b>\$ 6.8</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

The estimate is based on estimated quantities and average bid prices for similar projects.

### Project Risks

No significant risks are anticipated.

### Schedule

Environmental Approval Date: 12/11/2017  
 Municipal Consent Approval Date: Not Needed  
 Geometric Layout Approval Date: Not Needed  
 Construction Limits Established Date: Not Needed  
 Original Letting Date: 4/26/2019  
 Current Letting Date: 4/26/2019  
 Construction Season: 2019  
 Estimated Substantial Completion: Summer 2019



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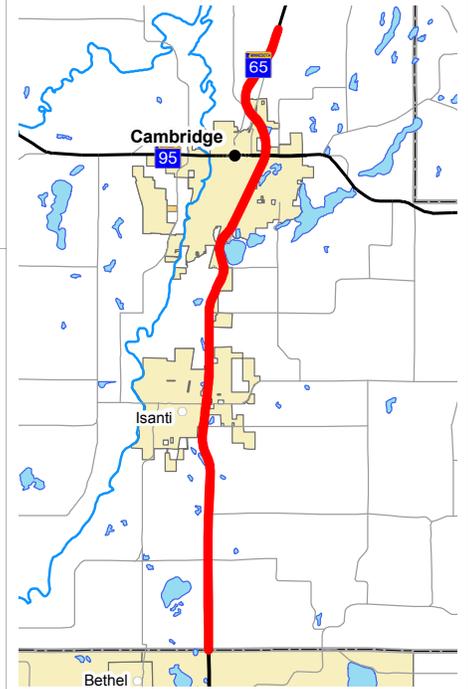
**District Engineer:** Dan Anderson  
**Project Manager:** Russell Fellbaum

**Revised Date:** 12/15/2016

## PROJECT SUMMARY

Hwy 65  
Anoka/Isanti County line to end of 4-lane road north of Cambridge  
Bridge NA  
State Project No. 3003-47N/47P

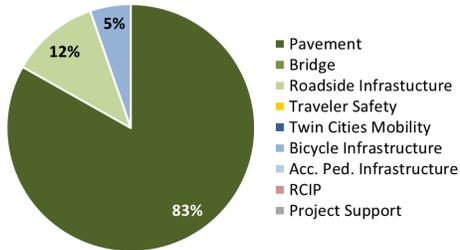
Substantially Complete



### Primary Purpose

Performance-based Need: Pavement

### Investment Category



### Project Description

The project provides for road rehabilitation and resurfacing, on segments covering 14.3 miles from the Anoka/Isanti County line to north of Cambridge. It includes resurfacing of segments from the county line to south of the Cambridge bypass, and a concrete overlay on a segment from north of County Highway 19 to the end of the 4-lane stretch north of Cambridge.

### Recent Changes and Updates

This project was advanced from FY 2019 to FY 2018 with a combination of savings and changes to the district's construction program. The project was let for \$10.8 million. This was less than the \$12.8 million that was previously the current estimated construction cost. Completion of this project is expected in fall 2017.

### Project History

The project was selected to address deteriorating pavement. It includes placement of a white-topping concrete overlay on top of the existing asphalt instead of just asphalt to improve the useful life of the pavement. A new cost estimate was prepared using updated bid prices for typical work and to account for inflation.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2015

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 11.7	\$ 10.8
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 2.3	\$ 2.6
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 14.0</b>	<b>\$ 13.4</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

The baseline estimate is based on actual estimated quantities and average bid prices. The current estimate is based on actual bid and letting.

### Project Risks

Bid prices for placing a concrete overlay on top of bituminous are difficult to predict and slight variations could result in impacts to the district's construction budget.

### Schedule

Environmental Approval Date: 3/01/16  
Municipal Consent Approval Date: Not Needed  
Geometric Layout Approval Date: Not Needed  
Construction Limits Established Date: 8/15/16  
Original Letting Date: 6/29/2018  
Current Letting Date: 4/28/2017  
Construction Season: 2017  
Estimated Substantial Completion: Fall 2017



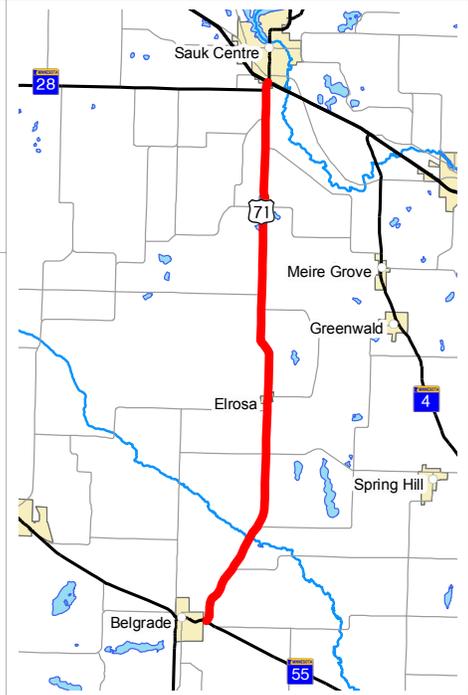
Minnesota Department of Transportation  
District 3  
7694 Industrial Boulevard  
(218) 828-5700

**District Engineer:** Dan Anderson  
**Project Manager:** Eric Schiller

**Revised Date:** 12/15/2016

# PROJECT SUMMARY

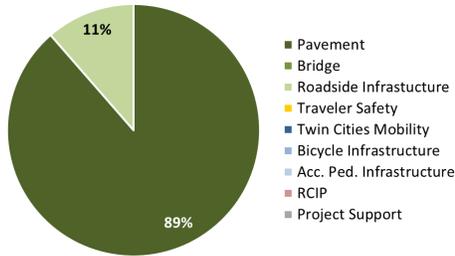
Hwy 71  
 Belgrade to Sauk Centre  
 Bridge NA  
 State Project No. 7318-39  
 NA  
**Substantially Complete**



## Primary Purpose

Performance-based Need: Pavement

## Investment Category



## Project Description

The project is for resurfacing from the east junction at Hwy 55 in Belgrade to I-94 in Sauk Centre.

## Recent Changes and Updates

Construction is complete on this project. Actual letting and construction costs were lower than what was originally programmed due to favorable bid prices.

## Project History

The project was selected to address deteriorating pavement. The letting date changed to keep a balanced letting schedule. This project was funded with extra National Highway Performance Program funding that was provided to the district for improving pavement conditions on the National Highway System.

The decision was made to remove the urban segment of this project through the City of Elrosa and to address pedestrian accessibility needs separately without delaying work on the rural segment. The Elrosa segment will retain its original project number (e.g., SP 7318-38) and was delayed to FY 2017 while the rural segment was identified as SP 7318-39. This project was completed in August 2016.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2013

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 6.2	\$ 4.3
Other Construction Elements:	\$ 0.0	\$ 0.5
Engineering:	\$ 1.2	\$ 0.0
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 7.4</b>	<b>\$ 5.1</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

The baseline estimate is based on actual estimated quantities and average bid prices. The current estimate is based on actual bid and letting.

## Project Risks

No project risks remain.

## Schedule

Environmental Approval Date: 12/04/2015  
 Municipal Consent Approval Date: Not Needed  
 Geometric Layout Approval Date: Not Needed  
 Construction Limits Established Date: Not Needed  
 Original Letting Date: 12/18/2015  
 Current Letting Date: 3/18/2016  
 Construction Season: 2016  
 Estimated Substantial Completion: August 2016



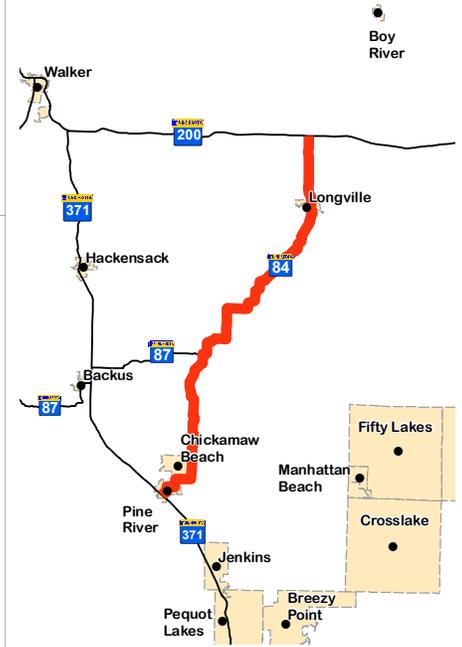
Minnesota Department of Transportation  
 District 3  
 7694 Industrial Boulevard  
 (218) 828-5700

**District Engineer:** Dan Anderson  
**Project Manager:** Claudia Dumont

**Revised Date:** 12/15/2016

## PROJECT SUMMARY

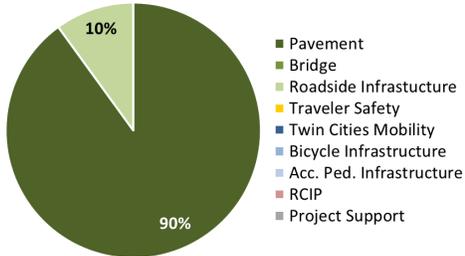
Hwy 84  
 Pine River to Hwy 200  
 Bridge NA  
 State Project No. 1110-14  
 NA  
**Substantially Complete**



### Primary Purpose

Performance-based Need: Pavement

### Investment Category



### Project Description

The project is for resurfacing from Cass Co Hwy 1 in Pine River north to Hwy 200 north of Longville.

### Recent Changes and Updates

Construction is complete on this project. The let amount for this project was \$2.8 million, which was less than the \$4.9 million previous estimated construction costs. Existing shoulder width allowed for paving the shoulder and the roadway in a single pass, allowing for much higher production rates. This, in part, resulted in favorable bid results for the project. Overall, the district has been seeing favorable bid results on bituminous.

### Project History

The project was selected to address deteriorated pavement. It was advanced to FY 2017 with program savings. The project was selected for advancement because of the condition of the current roadway surface and ease of implementation.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2016

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 4.9	\$ 2.8
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 1.0	\$ 0.6
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 5.9</b>	<b>\$ 3.4</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

The baseline estimate is based on actual estimated quantities and average bid prices. The current estimate is based on actual bid and letting.

### Project Risks

No significant risks are anticipated.

### Schedule

Environmental Approval Date: 01/04/2017  
 Municipal Consent Approval Date: Not Required  
 Geometric Layout Approval Date: Not Required  
 Construction Limits Established Date: Not Needed  
 Original Letting Date: 4/28/2017  
 Current Letting Date: 4/28/2017  
 Construction Season: 2017  
 Estimated Substantial Completion: Summer 2017



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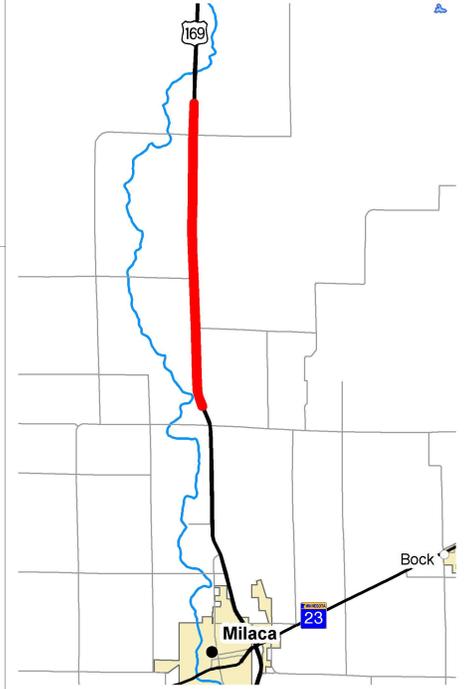
**District Engineer:** Dan Anderson  
**Project Manager:** Eric Schiller

**Revised Date:** 12/15/2016

# PROJECT SUMMARY

Hwy 169  
 Mille Lacs County Hwy 11 to Rum River Rest Area  
 Bridge NA  
 State Project No. 4812-86

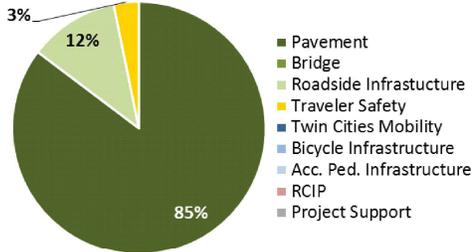
**Substantially Complete**



## Primary Purpose

Performance-based Need: Pavement Condition & District Safety Plan

## Investment Category



## Project Description

This project involves the reconstruction of the northbound lane, including turn lane extensions, on Hwy 169 north of Milaca, from Mille Lacs County Hwy 11/190th St. to the Rum River Rest Area.

## Recent Changes and Updates

Construction of this project is complete. Unsuitable materials in the soil were discovered during construction requiring additional excavation and replacement of the embankments necessary to properly construct the roadway.

## Project History

The pavement condition along this heavily traveled corridor is deteriorating. Routine resurfacing of this segment is no longer a viable option. A full reconstruction is necessary. The project received \$5 million in extra National Highway Performance Program funding to enable the district to reconstruct this section of roadway. The award was higher than the engineer's estimate. Federal Highway Safety Improvement Program safety funds for the turn lane extension were removed. Turn lane work was funded with National Highway Performance Program funds, which is the same source used for the reconstruction work.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2012

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 7.2	\$ 8.1
Other Construction Elements:	\$ 0.0	\$ 2.5
Engineering:	\$ 1.4	\$ 0.9
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 8.6</b>	<b>\$ 11.6</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

The baseline estimate used estimated quantities and average bid prices. The current estimate is based on actual bid and letting.

## Project Risks

No significant risks are anticipated.

## Schedule

Environmental Approval Date: Completed  
 Municipal Consent Approval Date: Not Required  
 Geometric Layout Approval Date: Pending  
 Construction Limits Established Date: 8/11/2014  
 Original Letting Date: 3/27/2015  
 Current Letting Date: 6/26/2015  
 Construction Season: 2015-2016  
 Estimated Substantial Completion: Fall 2016



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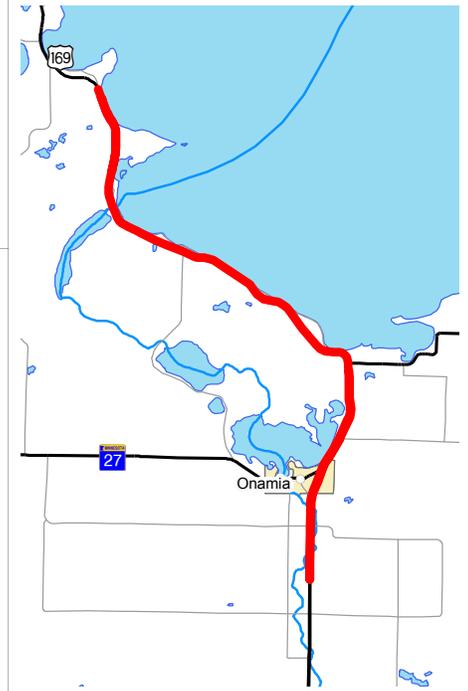
District Engineer: Dan Anderson  
 Project Manager: Jim Hallgren

Revised Date: 12/15/2016

## PROJECT SUMMARY

Hwy 169  
Mille Lacs County Hwy 19 south of Onamia to Vineland  
Bridge NA  
State Project No. 4812-84

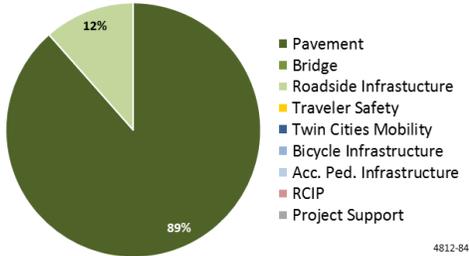
Substantially Complete



### Primary Purpose

Performance-based Need: Pavement

### Investment Category



4812-84

### Project Description

This project is for resurfacing from Mille Lacs County Hwy 19 to just south of Wagidaaki Rd in Vineland, including turn lane improvements at various intersections and other safety improvements.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2012

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 4.1	\$ 3.3
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 0.8	\$ 0.7
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 4.9</b>	<b>\$ 4.0</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Recent Changes and Updates

Construction is complete. The award was lower than engineer's original baseline estimate. Minor adjustments were made to the project construction limits to reflect deteriorating pavement conditions.

### Project History

The project was selected to address deteriorating pavement.

### Key Cost Estimate Assumptions

The baseline estimate used estimated quantities and average bid prices. The current estimate is based on actual bid price and letting.

### Project Risks

Coordination of the project with the Mille Lacs Band of Ojibwe is important so that state/tribal relationships are not negatively impacted.

### Schedule

Environmental Approval Date: 2/13/2015  
Municipal Consent Approval Date: Not Needed  
Geometric Layout Approval Date: Not Needed  
Construction Limits Established Date: Not Needed  
Original Letting Date: 2/26/2016  
Current Letting Date: 11/20/2015  
Construction Season: 2016  
Estimated Substantial Completion: 2016



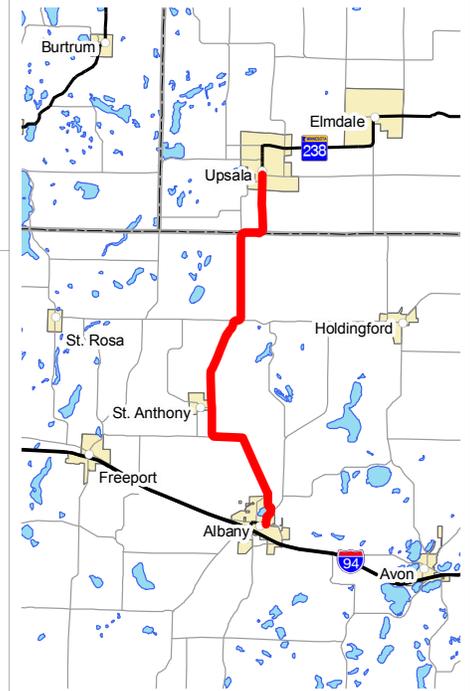
Minnesota Department of Transportation  
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7694 Industrial Boulevard  
(218) 828-5700

**District Engineer:** Dan Anderson  
**Project Manager:** Jim Hallgren

**Revised Date:** 12/15/2016

# PROJECT SUMMARY

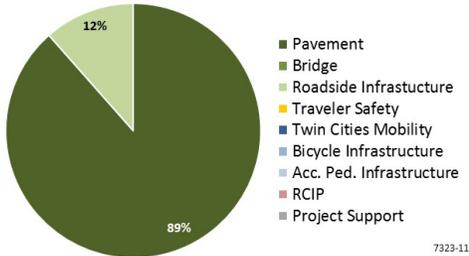
Hwy 238  
Albany to Upsala  
Bridge NA  
State Project No. 7323-12/12S  
NA  
**Substantially Complete**



## Primary Purpose

Performance-based Need: Pavement

## Investment Category



7323-11

## Project Description

This is a pavement project from Albany to Upsala, which includes widening the road.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2013

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 7.2	\$ 6.3
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 1.4	\$ 1.3
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 8.6</b>	<b>\$ 7.6</b>

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

## Recent Changes and Updates

Construction is expected to be completed in fall 2017. The award amount of \$3.6 million is less than the original baseline estimate due to low bituminous prices.

## Project History

The project was selected to address deteriorated pavement. A layout is not required for rural resurfacing, nor are construction limits. This project was modified, removing an urban segment in Albany from the original project and changing the project number (from SP 7323-11 to SP 7323-12). The former project (SP 7323-11) is being retained with the Albany urban portion, which will be completed in 2018 following completion of this project. The cost estimate was updated to reflect splitting the project into two phases. Previously, the scope and project cost were modified to add shoulder improvements for improved safety. The cost estimate had been adjusted for right of way costs associated with pedestrian accessibility improvements in Albany.

## Key Cost Estimate Assumptions

The baseline estimate used estimated quantities and average bid prices. The current estimate is based on actual bid price and letting.

## Project Risks

If the detour route is seen as too long, then the district may have to change the detour route.

## Schedule

Environmental Approval Date: Completed  
Municipal Consent Approval Date: Not Needed  
Geometric Layout Approval Date: Not Needed  
Construction Limits Established Date: Not Needed  
Original Letting Date: 12/16/2016  
Current Letting Date: 12/16/2016  
Construction Season: 2017  
Estimated Substantial Completion: Fall 2017



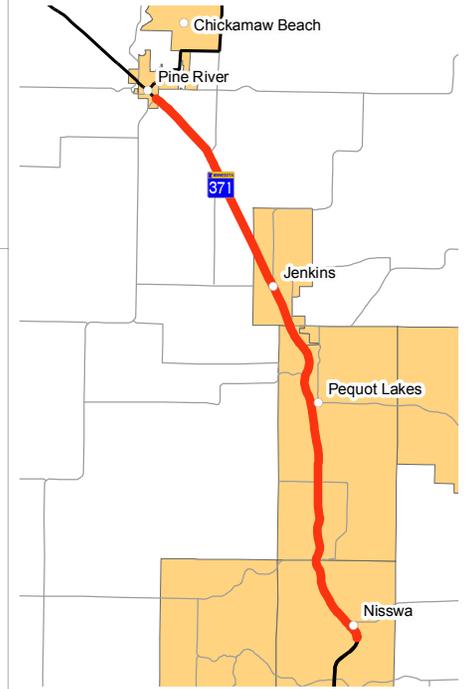
Minnesota Department of Transportation  
District 3  
7694 Industrial Boulevard  
(218) 828-5700

District Engineer: Dan Anderson  
Project Manager: Claudia Dumont

Revised Date: 12/15/2016

## PROJECT SUMMARY

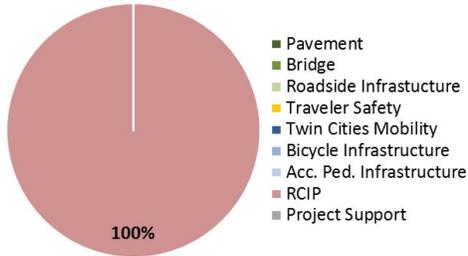
Hwy 371  
Nisswa to Jenkins  
Bridge NA  
State Project No. 1810-92  
**Substantially Complete**



### Primary Purpose

Regional & Community Improvement Priority

### Investment Category



### Project Description

This project is for major construction to convert two-lane highway to a four-lane expressway, from just north of Crow Wing County Hwy 18 in Nisswa to just north of County Hwy 16 in Jenkins. Work includes the replacement of Cullen Brook Bridge and construction of a new interchange at Crow Wing County Hwy 11.

### Recent Changes and Updates

Construction of this project is complete and new roadway open to traffic. The actual bid price for this project was less than the \$58 million previous estimated construction cost. This was due to low bituminous prices combined with innovative project design and construction techniques.

### Project History

The project was recently let with the best value bidder identified. It was originally funded as a MnDOT Major Regional & Community Improvement Priority commitment. In 2014, the project was advanced to 2016 through the Corridors of Commerce program, with funding made possible by cost savings and other efficiencies at MnDOT. The district anticipates construction to be completed in 2017. The project was identified as a design-build contract.

Phase 2 of Hwy 371 North Environmental Impact Statement received municipal consent in Pequot Lakes in December 2010. Nisswa provided their municipal consent in February 2011. Municipal Consent was received in Jenkins on March 2015. A re-evaluation of the Environmental Document was completed on June 16, 2015.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2014

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 58.0	\$ 49.9
Other Construction Elements:	\$ 0.0	\$ 1.9
Engineering:	\$ 11.6	\$ 0.0
Right of Way:	\$ 7.7	\$ 5.0
<b>Total:</b>	<b>\$ 77.3</b>	<b>\$ 56.8</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

The baseline estimate used estimated quantities and average bid prices. The current estimate is based on the actual bid for the design-build contract. The engineering costs were included in the construction letting total.

### Project Risks

The City of Pequot Lakes wastewater spray field mitigation plan could delay construction of this project if it is not completed before Aug. 1, 2016. Other potential areas of concern are in traffic control and managing congestion during construction.

### Schedule

Environmental Approval Date: 10/21/2010  
Municipal Consent Approval Date: 2/16/2011  
Geometric Layout Approval Date: 10/19/2010  
Construction Limits Established Date: 12/15/2014  
Original Letting Date: 7/24/2009  
Current Letting Date: 10/14/2015  
Construction Season: 2016-2017  
Estimated Substantial Completion: Fall 2017



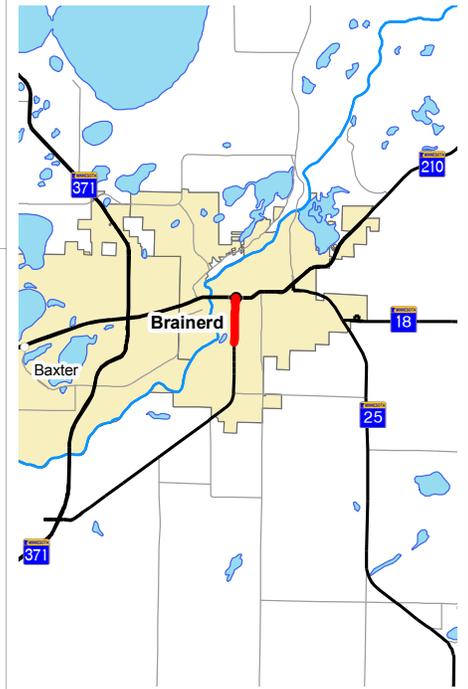
Minnesota Department of Transportation  
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7694 Industrial Boulevard  
(218) 828-5700

**District Engineer:** Dan Anderson  
**Project Manager:** Jim Hallgren

**Revised Date:** 12/15/2016

# PROJECT SUMMARY

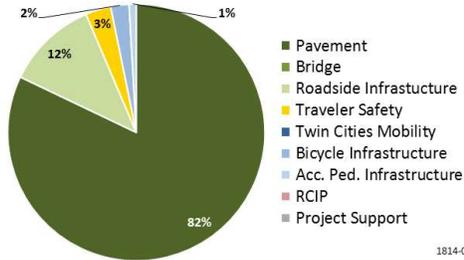
Hwy 371B  
 Washington Street to Joseph Street in Brainerd  
 Bridge NA  
 State Project No. 1814-06  
 NA



## Primary Purpose

Performance-based Need: Pavement

## Investment Category



## Project Description

The project consists of road reconstruction in Brainerd, including bicycle and pedestrian accommodations and curb and gutter, from Hwy 210 (Washington St.) to Joseph St. MnDOT partnered with the city to extend the trail from Joseph St. to Buffalo Hills Lane.

## Recent Changes and Updates

Municipal consent from the city was obtained. The project is being authorized for letting and construction.

## Project History

The project was selected to replace deteriorated pavement and city utilities. The City of Brainerd provided the preferred alternative. Geometric Layout has been submitted for approval. This project was delayed one fiscal year from 2017 to 2018 in order to advance a Hwy 25 project (SP 0508-13) so that it could be tied to other work planned on Hwy 25 for 2017. The district is currently developing proposals to address pedestrian concerns and minimize right of way impacts. The current cost estimate includes cost for right of way.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2013

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 7.5	\$ 7.5
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 1.5	\$ 1.5
Right of Way:	\$ 0.1	\$ 0.3
<b>Total:</b>	<b>\$ 9.1</b>	<b>\$ 9.3</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

The baseline estimate is based on estimated quantities and average bid prices for similar projects.

## Project Risks

Risks associated with accommodating pedestrian accessibility needs were retired under the design alternatives being considered. The city wanted to install a signal at Willow St., which could result in a delay of municipal consent for the project.

## Schedule

Environmental Approval Date: 6/15/2016  
 Municipal Consent Approval Date: 12/7/2016  
 Geometric Layout Approval Date: 12/8/2016  
 Construction Limits Established Date: 4/1/2016  
 Original Letting Date: 2/26/2016  
 Current Letting Date: 9/22/2017  
 Construction Season: 2017-2018  
 Estimated Substantial Completion: Fall 2018



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**District Engineer:** Dan Anderson  
**Project Manager:** Jim Hallgren

**Revised Date:** 12/15/2016

# PROJECT SUMMARY

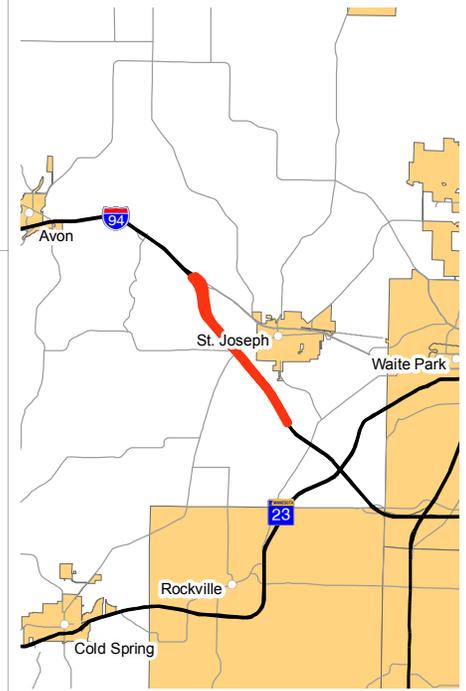
I-94

Stearns County Hwy 75 to bridge over Sauk River

Bridge NA

State Project No. 7380-239

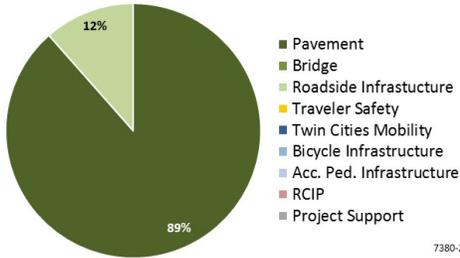
**Substantially Complete**



## Primary Purpose

Performance-based Need: Pavement

## Investment Category



7380-239

## Project Description

This project is a concrete overlay from Stearns County Hwy 75 west of St. Joseph to the west end of the bridge (#73865 and #73866) over Sauk River. The project also includes road resurfacing from Stearns County Rd 159 at Collegeville to Stearns County Hwy 75.

## Recent Changes and Updates

Construction of this project is complete.

## Project History

The project was originally selected as a bituminous overlay to address deteriorating pavement. It received additional funds to construct an unbonded concrete overlay, which is a longer term fix. The project received an additional \$3 million in federal funds (under the National Highway Performance Program) to pursue a longer term pavement fix in the unbonded concrete overlay section. This project was combined with SP 7380-223 in 2014. This project was expanded to include an adjacent section of I-94, which was set for the same year (7380-223), resulting in an increase to the original baseline estimate. Combining the projects will result in better bid prices, better construction staging and more efficient construction administration. Actual award was \$2.9 million less than the current estimate shown in last year's report.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2012

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 10.0	\$ 12.6
Other Construction Elements:	\$ 0.0	\$ 0.9
Engineering:	\$ 2.0	\$ 1.1
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 12.0</b>	<b>\$ 14.6</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

The baseline estimate is based on estimated quantities and average bid prices. The estimate had increased to account for the change in type of repair work to include an unbonded concrete overlay. The current estimate is based on actual bid amount and letting.

## Project Risks

If the project significantly reduces good traffic flow during construction, MnDOT may have to modify the project's schedule and deal with increased costs.

## Schedule

Environmental Approval Date: 04/06/15  
 Municipal Consent Approval Date: NA  
 Geometric Layout Approval Date: NA  
 Construction Limits Established Date: 08/18/15  
 Original Letting Date: 2/26/2016  
 Current Letting Date: 2/26/2016  
 Construction Season: 2016  
 Estimated Substantial Completion: Fall 2016



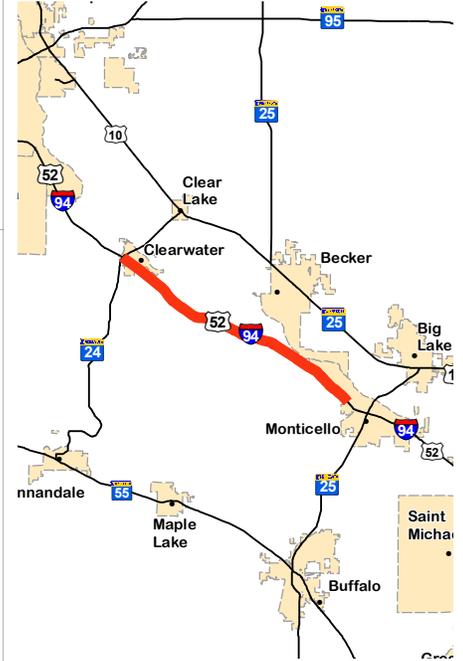
Minnesota Department of Transportation  
 District 3  
 7694 Industrial Boulevard  
 (218) 828-5700

**District Engineer:** Dan Anderson  
**Project Manager:** Eric Schiller

**Revised Date:** 12/15/2016

# PROJECT SUMMARY

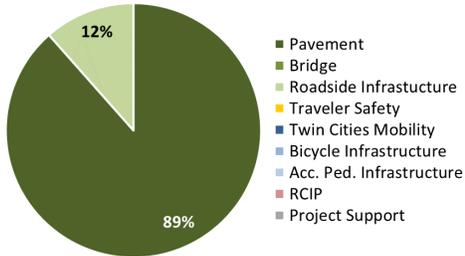
I-94  
 Monticello to Clearwater  
 Bridge NA  
 State Project No. 8680-173  
[www.mndot.gov/d3/i94/](http://www.mndot.gov/d3/i94/)



## Primary Purpose

Performance-based Need: Pavement

## Investment Category



## Project Description

The project is for pavement rehabilitation and replacement from the Wright County Hwy 39 overpass at Monticello to Hwy 24 in Clearwater.

## Recent Changes and Updates

A new cost estimate was prepared to account for increased costs for managing traffic. Four lanes of traffic need to be maintained during construction to prevent long back-ups on I-94 that would impede people and goods movement especially during higher volume commute and recreational peaks.

## Project History

The project was selected to address deteriorating pavement. Project development staff were not available so a consultant was hired to develop the layout, environmental document and maintenance of traffic staging. Additional roadway width for maintenance of traffic is driving the current cost estimate

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2016

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 16.0	\$ 89.6
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 3.2	\$ 17.9
Right of Way:	\$ 0.0	\$ 0.2
<b>Total:</b>	<b>\$ 19.2</b>	<b>\$ 107.7</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

The estimate is based on estimated quantities and average bid prices for similar projects.

## Project Risks

A potential risk is in costs due to maintenance of traffic during construction.

## Schedule

Environmental Approval Date: pending  
 Municipal Consent Approval Date: pending  
 Geometric Layout Approval Date: pending  
 Construction Limits Established Date: pending  
 Original Letting Date: 6/21/2019  
 Current Letting Date: 1/31/2020  
 Construction Season: 2020/2021  
 Estimated Substantial Completion: Fall 2021



Minnesota Department of Transportation  
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**District Engineer:** Dan Anderson  
**Project Manager:** Claudia Dumont

**Revised Date:** 12/15/2016

## PROJECT SUMMARY

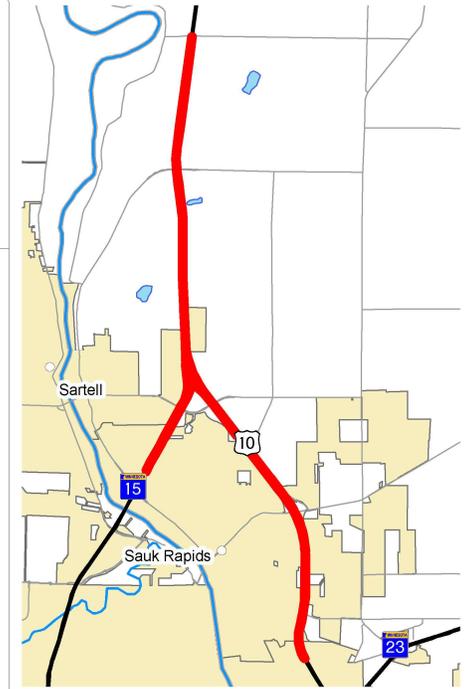
Hwy 10

Benton CR 4 to railroad crossing near St. Germain St. in St. Cloud; and, on Hwy 15 from Hwy 10 for one mile south

Bridge NA

State Project No. 0502-103

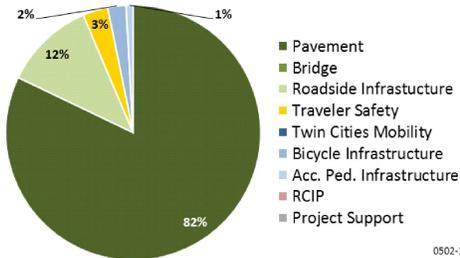
**Substantially Complete**



### Primary Purpose

Performance-based Need: Pavement

### Investment Category



0502-103

### Project Description

The project consisted of a concrete overlay on Hwy 10 from Benton CR 4 to just west of the railroad crossing near St. Germain St. in St. Cloud and reconstruction on Hwy 15 from Hwy 10 to 1 mile south.

### Recent Changes and Updates

Project construction was completed in July 2015.

### Project History

The cost estimate changed due to project complexity, which required more reconstruction, additional signage replacement, and erosion control, and had construction staging issues. The letting date changed due to a delayed Corps of Engineers Permit.

Several concrete pavement rehabilitation projects were performed on this roadway. The concrete pavement has reached the end of its useful life and must be overlaid. Extra federal funds (under the NHPP program in MAP-21) were used for additional work on the Hwy 15 segment.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2011

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 11.9	\$ 20.1
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 2.4	\$ 2.8
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 14.3</b>	<b>\$ 22.9</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

The baseline estimate is based on estimated quantities and average bid prices. Additional costs in current estimate reflect work added on Highway 15. The current estimate reflects the amount encumbered amount.

### Project Risks

There are no remaining risks.

### Schedule

Environmental Approval Date: 04/07/2014  
 Municipal Consent Approval Date: Not Needed  
 Geometric Layout Approval Date: Not Needed  
 Construction Limits Established Date: Unknown  
 Original Letting Date: 01/24/2014  
 Current Letting Date: 06/06/2014  
 Construction Season: 2014 & 2015  
 Estimated Substantial Completion: July 2015



Minnesota Department of Transportation  
 District 3  
 7694 Industrial Boulevard  
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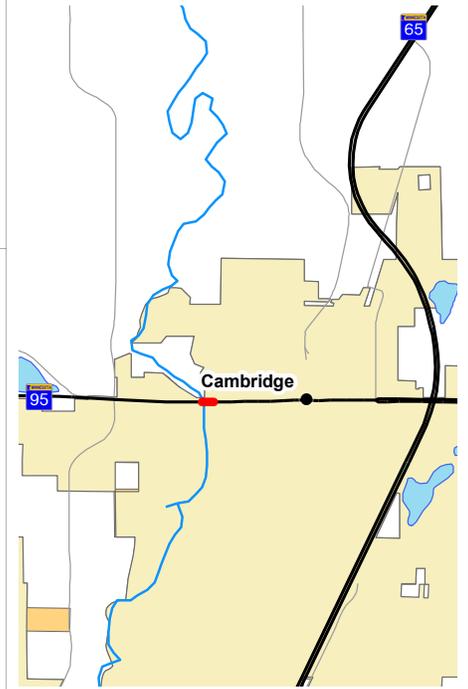
District Engineer: Dan Anderson  
 Project Manager: Claudia Dumont

Revised Date: 12/15/2016

## PROJECT SUMMARY

Hwy 95  
Rum River Bridge in Cambridge  
Bridge 9173  
State Project No. 3006-36

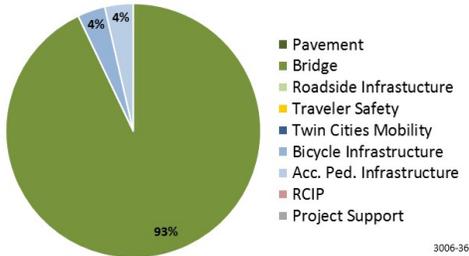
NA  
**Substantially Complete**



### Primary Purpose

Performance-based Need: Bridge Condition

### Investment Category



3006-36

### Project Description

This project replaced a bridge with a new one (#30001) over the Rum River a bit west of Cambridge.

### Recent Changes and Updates

Construction of this project is completed.

### Project History

The replaced bridge (#9173) was built in 1963. It had a substandard engineering design and was due for replacement. The replacement bridge design was reviewed to ensure the new structure could be expanded to a four-lane bridge, if needed, in the future.

The letting date changed due to federal project review and development requirements. Construction cost was reduced due to an exceptionally low bid.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2010

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 7.3	\$ 6.0
Other Construction Elements:	\$ 0.0	\$ 0.1
Engineering:	\$ 1.5	\$ 1.2
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 8.8</b>	<b>\$ 7.3</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

The baseline estimate is based on actual estimated quantities and average bid prices. The current estimate is based on actual bid and letting.

### Project Risks

There are no remaining risks.

### Schedule

Environmental Approval Date: 2/28/2014  
Municipal Consent Approval Date: Not Needed  
Geometric Layout Approval Date: Not Needed  
Construction Limits Established Date: Unknown  
Original Letting Date: 2/22/2013  
Current Letting Date: 3/28/2014  
Construction Season: 2014 - 2015  
Estimated Substantial Completion: Spring 2015



Minnesota Department of Transportation  
District 3  
7694 Industrial Boulevard  
(218) 828-5700

**District Engineer:** Dan Anderson  
**Project Manager:** Claudia Dumont

**Revised Date:** 12/15/2016

## PROJECT SUMMARY

I-94  
Rogers to St. Michael  
Bridge NA  
State Project No. 2780-66  
<http://www.dot.state.mn.us/d3/i94/index.html>

**Substantially Complete**



### Primary Purpose

Regional & Community Improvement Priority

### Investment Category

\*This project was designed and scoped before the current highway investment plan MnSHIP was developed, which breaks projects into investment categories.

### Project Description

This project constructed an auxiliary lane in the eastbound direction from Hwy 241 in St. Michael to Hwy 101 in Rogers, including an extension of the westbound exit ramp at Hwy 101, widening of bridges over the Crow River, and the construction of a westbound third lane from Hwy 101 to Hwy 241.

### Recent Changes and Updates

The project was completed and opened to traffic in October 2015. A full accounting of the project engineering costs are now reflected in the substantially complete estimate. This addition, of the actual engineering costs, created the increase shown.

### Project History

The project was announced in September 2014 to be funded under the Corridors of Commerce program. The project was amended into the STIP on May 14, 2014. The design-build process was used to expedite construction.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 5/14/2014

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 40.0	\$ 28.3
Other Construction Elements:	\$ 0.0	\$ 0.9
Engineering:	\$ 0.0	\$ 3.8
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 40.0</b>	<b>\$ 33.0</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

Since this project followed a design-build process, the construction letting total includes construction, design and construction oversight costs. The current estimate is based on actual estimated amount.

### Project Risks

No significant risks are remaining.

### Schedule

Environmental Approval Date: 1/27/2014  
Municipal Consent Approval Date: 4/22/2014  
Geometric Layout Approval Date: 2/14/2014  
Construction Limits Established Date: 2/14/2014  
Original Letting Date: 5/14/2014  
Current Letting Date: 5/14/2014  
Construction Season: 2014-2015  
Estimated Substantial Completion: October 2015

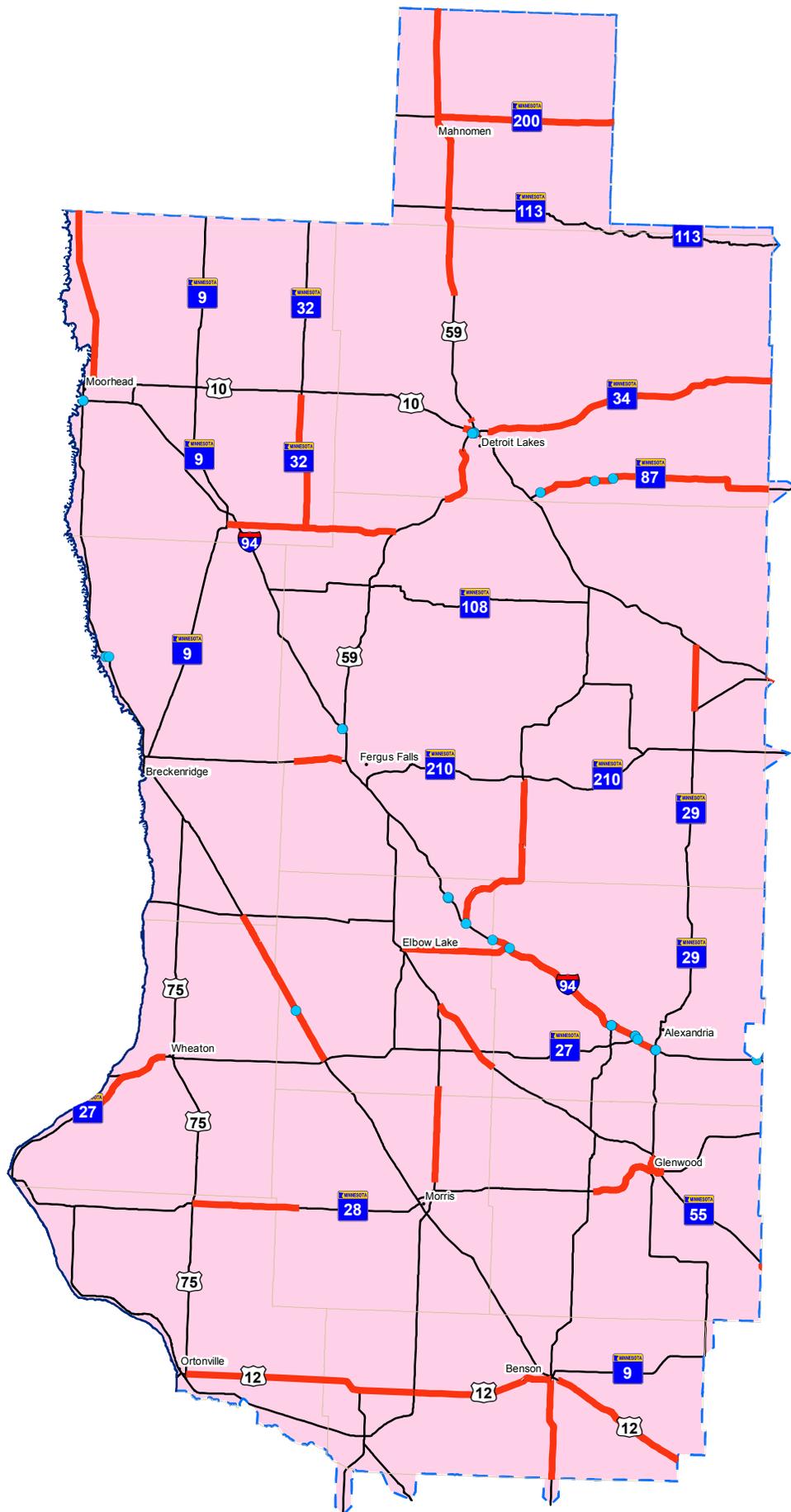


Minnesota Department of Transportation  
District 3  
7694 Industrial Boulevard  
(218) 828-5700

District Engineer: Dan Anderson  
Project Manager: Claudia Dumont

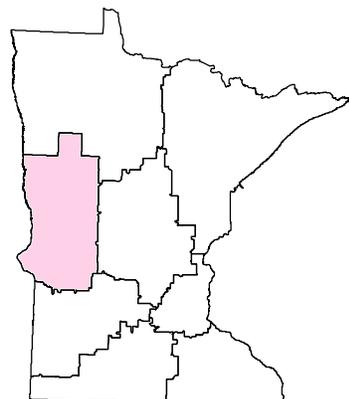
Revised Date: 12/15/2016

# Major Highway Projects 2017 D4-DETROIT LAKES



## Major Highway Projects

- Bridge Projects
- Roadway Projects
- State Boundary
- County Line
- Construction District



## District Project Summary

### District 4

Route	State Project #	Project Location	Page
TH 87	0306-31	Frazee to East Becker County Line	D 2
TH 55	2609-36	Barrett to South County Line	D 3
I94	2680-44	ON I94, 0.4 MILES E. OF GRANT COUNTY LINE TO JCT. MN 79 ON I94 WB	D 4
106	5622-16	From US 10 to MN 29 in Deer Creek	D 5
I 94	2180-115	TH 114 to TH 29	D 6
Hwy 9	2601-19	Herman to Hwy 55	D 7
Hwy 10	0301-60	Detroit Lakes	D 8
Hwy 10	0301-63	Jct. TH 59 to Summit Ave. in Detroit Lakes	D 9
Hwy 12	7604-22	Hwy 59 to City of Benson	D 10
Hwy 12	7605-89	Benson to Kerkhoven	D 11
Hwy 12	0603-16	Hwy 75 in Ortonville to Hwy 59	D 12
Hwy 27	7802-33	On Hwy 27 from CSAH 6 to Wheaton and on Hwy 75 from Dumont to the Mustinka River bridge	D 13
Hwy 28	6103-32	Hwy 28, Hwy 29, Hwy 104 - Glenwood	D 14
Hwy 28	0606-11	Hwy 75 to Chokio	D 15
Hwy 28	6103-34	Starbuck to Glenwood	D 16
Hwy 29	2102-58	50th Avenue in Alexandria to County Road 28	D 17
Hwy 32	1402-19	Hwy 34 to Hwy 10	D 18
Hwy 34	1404-17	Hwy 9 in Barnesville to Hwy 59 at Dunvilla	D 19
Hwy 59	7506-17	From the junction of Hwy 28 to the north of the Stevens County line	D 20
Hwy 59	4404-13	South of the Buffalo River Bridge to Winger	D 21
Hwy 59	0304-37	North of CSAH 20 to south of Willow Street	D 22
Hwy 75	8408-44	Near Kent	D 23
Hwy 78	5619-11	I-94 to Battle Lake	D 24
Hwy 79	2613-18	Elbow Lake to Hwy 94	D 25
Hwy 200	4402-19	Hwy 59 to east Mahnomen County line	D 26
Hwy 210	5601-33	1.8 miles East of Wilkin County Line to 0.4 miles West of I-94	D 27
I-94	1406-66	I-94 and Hwy 75 interchange	D 28
I-94	2180-109	At various locations on I-94 from Fergus Falls to Osakis	D 29
Hwy 29	7607-29	Hwy 40 to Benson	D 30
Hwy 34	0303-64	Various Passing Lanes from Detroit Lakes to Akeley	D 31
Hwy 75	1407-25	Hwy 10 to north Clay County line	D 32

# PROJECT SUMMARY

TH 87

Frazee to East Becker County Line

Bridge 6674, 8700, 8690

State Project No. 0306-31

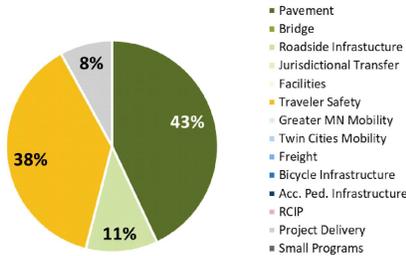
NA



## Primary Purpose

Performance based need - Pavement condition

## Investment Category



## Project Description

27.2 miles of mill & overlay, 12.7 miles of shoulder widening included from City of Frazee to East Becker County Line. Project includes numerous centerline, side pipes and cattle pass structures, and box culvert bridge replacements.

## Recent Changes and Updates

Project is a mill/overlay with shoulder widening and box culvert bridges from Frazee to Evergreen.

## Project History

No project history.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2017

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 12.7	\$ 12.7
Other Construction Elements:	\$ 0.8	\$ 0.8
Engineering:	\$ 2.7	\$ 2.7
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 16.2</b>	<b>\$ 16.2</b>

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

## Key Cost Estimate Assumptions

Scoping estimate dated June 20, 2017. 27% inflation rate applied to 2017 cost estimates to adjust for 2021 construction year.

## Project Risks

Construction staging, detour length, wetland environmental impacts, possible snow fence, box culvert bridge environmental impacts. Narrow shoulders and hydraulic improvements could increase the cost.

## Schedule

Environmental Approval Date: TBD  
 Municipal Consent Approval Date: TBD  
 Geometric Layout Approval Date: TBD  
 Construction Limits Established Date: TBD  
 Original Letting Date: 3-26-2021  
 Current Letting Date: 3-26-2021  
 Construction Season: 2021  
 Estimated Substantial Completion: October 2021



Minnesota Department of Transportation  
 District 4  
 1000 Hwy 10 W  
 (218) 846-3600

District Engineer: Jody Martinson  
 Project Manager: Thomas Pace

Revised Date: 12/15/2017

# PROJECT SUMMARY

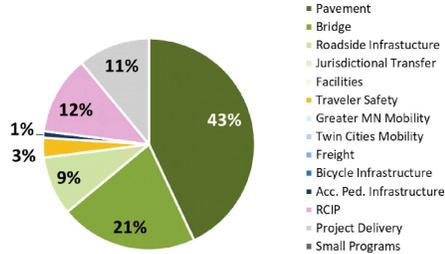
TH 55  
 Barrett to South County Line  
 Bridge 26X02  
 State Project No. 2609-36  
 NA



## Primary Purpose

Performance-based Need: Pavement

## Investment Category



## Project Description

Pavement Resurfacing from Barrett south to the County line and Replace Bridge #5480 with new #26X02

## Recent Changes and Updates

Mill & overlay project with bridge replacement.

## Project History

Project was developed to address declining pavement and bridge condition. Projects are being timed together to minimize disruption to the traveling public.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2017

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 5.0	\$ 5.0
Other Construction Elements:	\$ 1.2	\$ 1.2
Engineering:	\$ 1.2	\$ 1.2
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 7.4</b>	<b>\$ 7.4</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

Cost estimate is assuming a cold in place recycle and the replacement of a bridge with a triple box culvert over the Pomme De Terre River. In addition, estimate includes some anticipated pipe replacement work. A detailed bridge estimate is not yet available, so the estimate assumes average cost per square foot from similar bridge projects.

## Project Risks

Uncertain funds for CSAH Grant County work to a new elevator.

## Schedule

Environmental Approval Date: TBD  
 Municipal Consent Approval Date: Not needed  
 Geometric Layout Approval Date: Not needed  
 Construction Limits Established Date: 09-01-17  
 Original Letting Date: 03-20-2020  
 Current Letting Date: 03-20-2020  
 Construction Season: May 2020 - October 2020  
 Estimated Substantial Completion: October/2020

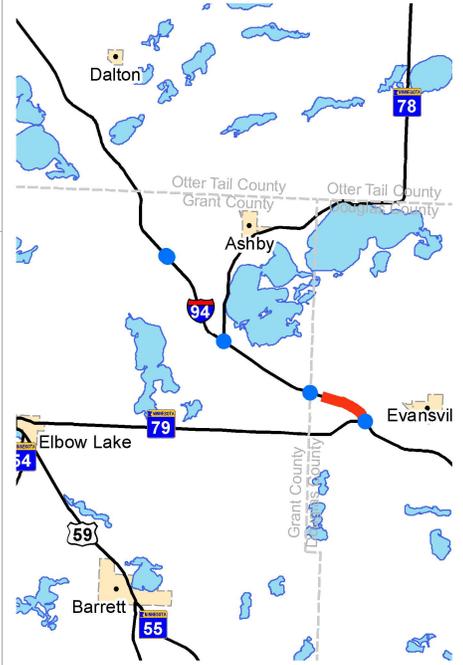


Minnesota Department of Transportation  
 District 4  
 1000 Hwy 10 W  
 (218) 846-3600  
 District Engineer: Jody Martinson  
 Project Manager: Tom Lundberg  
 Revised Date: 12/15/2017

## PROJECT SUMMARY

I94

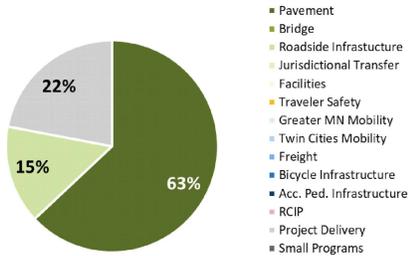
ON I94, 0.4 MILES E. OF GRANT COUNTY LINE TO JCT. MN 79 ON I94 WB  
 Bridge 26801, 26802, 26803, 21802, 26X01  
 State Project No. 2680-44  
 No



### Primary Purpose

Performance-based Need: Pavement

### Investment Category



### Project Description

11.7 mile concrete pavement rehabilitation project from 0.4 miles E. of Grant County Line TO JCT. of MN 79 ON WB I94. The project also includes hydraulic and guardrail upgrades at all bridges and culverts as necessary.

### Recent Changes and Updates

Croncrete Pavement Rehabilitation project. This project area was previously repaired in 2003 but after a field review by the concrete office and District 4 materials it was determined another repair could be done and the pavement would still be good for another 15 years.

### Project History

No project history.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2017

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 7.6	\$ 7.6
Other Construction Elements:	\$ 0.7	\$ 0.7
Engineering:	\$ 1.7	\$ 1.7
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 10.0</b>	<b>\$ 10.0</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

Baseline cost estimate is a scoping estimate from 2017 inflated to 2021.

### Project Risks

Hydraulic review will be done closer to project start date. Shoulders need repair. Guardrails need to be reviewed for adherence to current safety standards.

### Schedule

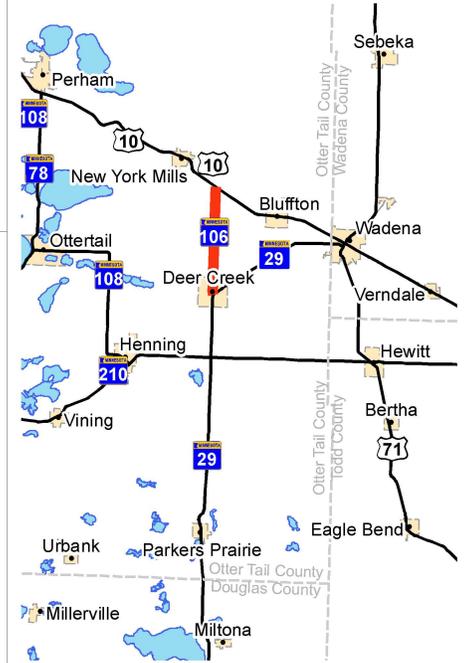
Environmental Approval Date: TBD  
 Municipal Consent Approval Date: Not needed  
 Geometric Layout Approval Date: Not needed  
 Construction Limits Established Date: TBD  
 Original Letting Date: 10-23-2020  
 Current Letting Date: 10-23-2020  
 Construction Season: May 2021 - October 2021  
 Estimated Substantial Completion: October/2021



Minnesota Department of Transportation  
 District 4  
 1000 Hwy 10 W  
 (218) 846-3600  
 District Engineer: Jody Martinson  
 Project Manager: Justin Knopf  
 Revised Date: 12/15/2017

# PROJECT SUMMARY

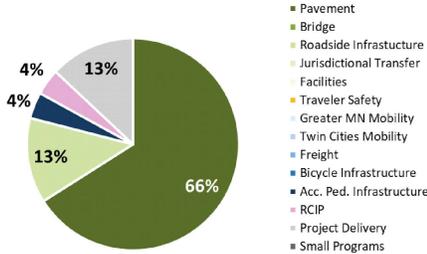
106  
 From US 10 to MN 29 in Deer Creek  
 Bridge NA  
 State Project No. 5622-16  
 NA



## Primary Purpose

Performance-based Need: Pavement condition

## Investment Category



## Project Description

On MN 106 from US 10 to MN 29 in Deer Creek, grading, cold in-place recycle, turn lanes, shoulder widening, ped ramps and sidewalks.

## Recent Changes and Updates

Project has been up-scoped to CIR pavement fix, added shoulder widening, 1.5 mile of regrading.

## Project History

Originally, this project was scoped for a 3" mill/fill with turn lanes being added at CSAH 52. Also, ADA improvements were included in the City of Deer Creek.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2017

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 6.4	\$ 6.4
Other Construction Elements:	\$ 0.6	\$ 0.6
Engineering:	\$ 1.4	\$ 1.4
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 8.3</b>	<b>\$ 8.3</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

Cost estimate dated July 13, 2017 and was inflated to 2018 construction.

## Project Risks

Bituminous prices may increase. Hydraulic issues may arise.

## Schedule

Environmental Approval Date: Pending Approval  
 Municipal Consent Approval Date: Not needed  
 Geometric Layout Approval Date: Not needed  
 Construction Limits Established Date: Pending approval  
 Original Letting Date: 02/23/2018  
 Current Letting Date: 5/18/2018  
 Construction Season: May 2018 to Oct. 2018  
 Estimated Substantial Completion: October/2018



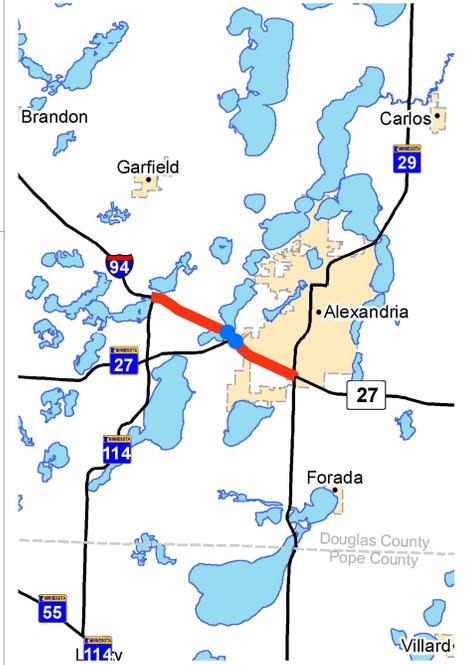
Minnesota Department of Transportation  
 District 4  
 1000 Hwy 10 W  
 (218) 846-3600

District Engineer: Jody Martinson  
 Project Manager: Brian Bausman

Revised Date: 12/15/2017

## PROJECT SUMMARY

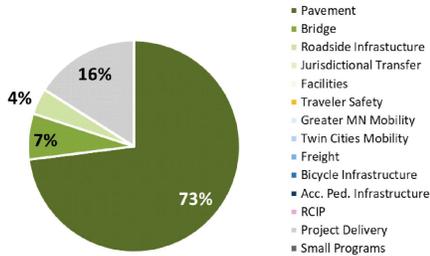
I 94  
 TH 114 to TH 29  
 Bridge 21805, 21806, &, 21825  
 State Project No. 2180-115  
 NA



### Primary Purpose

Performance-based Need: Pavement condition

### Investment Category



### Project Description

8" Unbonded Concrete Overlay on I-94 EB from 0.6 Mi. E. of TH 114 to 0.1 Mi. W. of TH 29 exit ramp

### Recent Changes and Updates

Scoping Report completed & approved July 5, 2017. This project was originally proposed as a 2023 project but has been moved up to 2019.

### Project History

This project was initiated because intense annual maintenance was required.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2017

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 6.2	\$ 6.2
Other Construction Elements:	\$ 0.6	\$ 0.6
Engineering:	\$ 1.2	\$ 1.2
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 8.0</b>	<b>\$ 8.0</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

Cost estimate is a scoping estimate dated June 18, 2017 and was inflated to 2019 letting.

### Project Risks

May need to include Lake Latoka Rest Area improvements with this project. Material cost escalation is possible. Hydraulic needs may change.

### Schedule

Environmental Approval Date: Not needed  
 Municipal Consent Approval Date: Not needed  
 Geometric Layout Approval Date: Not needed  
 Construction Limits Established Date: Pending approval  
 Original Letting Date: 01/25/2019  
 Current Letting Date: 01/25/2019  
 Construction Season: 2019  
 Estimated Substantial Completion: October/2019



Minnesota Department of Transportation  
 District 4  
 1000 Hwy 10 W  
 (218) 846-3600

District Engineer: Jody Martinson  
 Project Manager: Nathan Bausman

Revised Date: 12/15/2017

# PROJECT SUMMARY

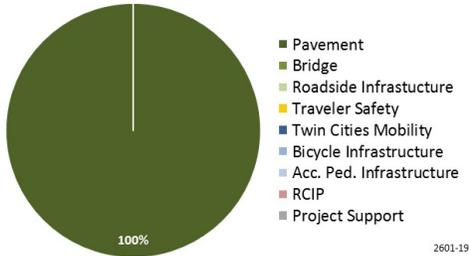
Hwy 9  
 Herman to Hwy 55  
 Bridge 6686  
 State Project No. 2601-19  
 NA



## Primary Purpose

Performance-based Need: Pavement condition

## Investment Category



## Project Description

Resurface 18.5 miles between Herman and the junction of Hwy 55 with 3-inch mill and 3-inch inlay. Updated work at bridge location. Curb ramps in Tintah and Norcross will be brought up to standards. Several poor culverts will be repaired or replaced. Sidewalk replacement in Herman.

## Recent Changes and Updates

Construction completed in June 2017.

## Project History

Final scoping approval was February 2013. The scoping report is complete.

The ADA requirements were reviewed with the ADA section in St. Paul. The pavement was deteriorating rapidly and would drop below the statewide average by 2016 or 2017. There are ADA non-compliant pedestrian ramps and sidewalks. Culverts were in poor condition.

Plans 60% complete in July 2015. 100% of the plans will be complete in December 2015. Added sidewalk replacement in Herman.

Finished plans were completed in December 2015. Project has been submitted for letting on Sept. 23, 2016.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2013

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 4.2	\$ 3.9
Other Construction Elements:	\$ 0.5	\$ 0.5
Engineering:	\$ 0.8	\$ 0.9
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 5.6</b>	<b>\$ 5.3</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

Job was let and awarded and has been constructed. The current estimate reflects low bid amount for the project.

## Project Risks

Contaminated soils in Herman. This project was selected to be a Flexible Project for 2016. A consultant was selected to do the advanced design so that this project could be ready to let early.

## Schedule

Environmental Approval Date: Not needed  
 Municipal Consent Approval Date: Not Needed  
 Geometric Layout Approval Date: Not Needed  
 Construction Limits Established Date: 05/15/2015  
 Original Letting Date: 02/26/2016  
 Current Letting Date: 12/16/2016  
 Construction Season: 2017  
 Estimated Substantial Completion: June 2017



Minnesota Department of Transportation  
 District 4  
 1000 Hwy 10 W  
 (218) 846-3600

**District Engineer:** Jody Martinson  
**Project Manager:** Brian Bausman

**Revised Date:** 12/15/2016

## PROJECT SUMMARY

Hwy 10  
 Detroit Lakes  
 Bridge 03001  
 State Project No. 0301-60  
<http://www.dot.state.mn.us/d4/projects/dlfrontageroad/>

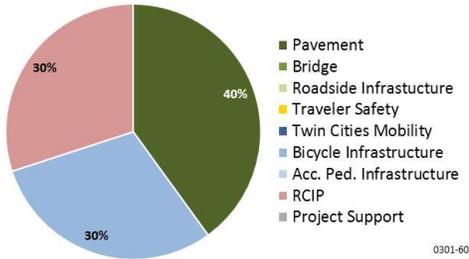
**Substantially Complete**



### Primary Purpose

Regional & Community Improvement Priority  
 Performance-based Need: Pavement

### Investment Category



### Project Description

The project is located on Hwy 10 from Airport Road to Hwy 59 and on Hwy 59 from Hwy 10 to Holmes Street. A bridge on Hwy 59 was constructed, as well as a city street running under the bridge. From the city street, a frontage road and trail system were constructed along both Hwy 59 and Hwy 10. Pavement was rehabilitated between Hwy 59 and Hwy 10 with ADA improvements, signals and lighting.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2011

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 14.0	\$ 14.3
Other Construction Elements:	\$ 0.7	\$ 0.3
Engineering:	\$ 2.8	\$ 4.3
Right of Way:	\$ 0.0	\$ 1.4
<b>Total:</b>	<b>\$ 17.4</b>	<b>\$ 20.3</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Recent Changes and Updates

Project was substantially complete in the fall of 2016. Contractor is doing corrective work on substandard pavement at no cost to state in Fall of 2017.

### Project History

The recommendations of a transportation planning study completed in June 2011 were incorporated into the Hwy 10 pavement project.

The project will provide safe and controlled access to Hwy 10 with the development of a frontage road system that allows vehicular/ bike/pedestrian travel from downtown Detroit Lakes to facilities west of Hwy 59 without having to travel on Hwy 10.

Project is under construction with substantial completion in fall 2015. Clean up of swamp area on frontage road will be done in 2016. Project is complete short of final punch list items. We are starting the process to turn back the constructed frontage roads to the City of Detroit Lakes.

### Key Cost Estimate Assumptions

Hwy 10 will be concrete on the existing alignment (airport to Hwy 59). The new frontage road south of Hwy 10 (Wal-Mart Property to DL Auto), and the underpass at Main Morrow with the city project on Thomas Avenue will be bituminous. The current cost estimate is the substantially complete cost of the project.

### Project Risks

Project is complete.

### Schedule

Environmental Approval Date: 05/21/2013  
 Municipal Consent Approval Date: 07/09/2013  
 Geometric Layout Approval Date: 05/31/2013  
 Construction Limits Established Date: 08/01/2013  
 Original Letting Date: 01/23/2015  
 Current Letting Date: 02/27/2015  
 Construction Season: May 2015 - November 2015  
 Estimated Substantial Completion: November/2016



Minnesota Department of Transportation  
 District 4  
 1000 Hwy 10 W  
 (218) 846-3600

**District Engineer:** Jody Martinson  
**Project Manager:** Tom Lundberg

**Revised Date:** 12/15/2016

## PROJECT SUMMARY

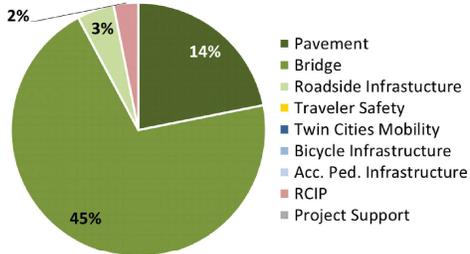
Hwy 10  
Jct. TH 59 to Summit Ave. in Detroit Lakes  
Bridge 03011, &, 03004  
State Project No. 0301-63  
NA



### Primary Purpose

Performance-based Need: Pavement and Bridge Condition

### Investment Category



### Project Description

Mill of existing bituminous and place back concrete pavement. Replace bridges with new bridge.

### Recent Changes and Updates

Project is being constructed and is planned to be complete November 2017.

### Project History

This project was programmed to correct poor pavement and match up similar concrete sections on either side.  
Final design will be completed fall 2016.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2014

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 0.9	\$ 4.8
Other Construction Elements:	\$ 0.3	\$ 0.6
Engineering:	\$ 0.3	\$ 1.1
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 1.5</b>	<b>\$ 6.4</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

Project was changed from a bridge overlay to a bridge replacement and extended to Summit Ave. with 7 inches of concrete, complex staging, preliminary bridge estimate. Job was let and awarded and is being constructed. The current estimate reflects low bid amount for the project.

### Project Risks

Complex staging and compressed timeline could affect bid costs. Bridge work over active rail line. Public patience with another long construction project in the area. Finishing concrete paving before the end of the construction season.

### Schedule

Environmental Approval Date: 8/10/2016  
Municipal Consent Approval Date: Not Needed  
Geometric Layout Approval Date: Not Needed  
Construction Limits Established Date: Not Needed  
Original Letting Date: 2/24/2017  
Current Letting Date: 1/27/2017  
Construction Season: 2017  
Estimated Substantial Completion: November 2017



Minnesota Department of Transportation  
District 4  
1000 Hwy 10 W  
(218) 846-3600

District Engineer: Jody Martinson  
Project Manager: Tom Lundberg

Revised Date: 12/15/2016

## PROJECT SUMMARY

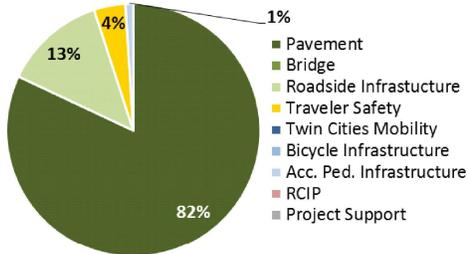
Hwy 12  
Hwy 59 to City of Benson  
Bridge NA  
State Project No. 7604-22  
NA



### Primary Purpose

Performance-based Need: Pavement condition

### Investment Category



### Project Description

15 mile pavement rehabilitation project from Hwy 59 to the City of Benson. The project also includes shoulder work, side culverts, snow drift control, and end posts on Bridge #76001.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2014

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 5.7	\$ 4.5
Other Construction Elements:	\$ 0.7	\$ 0.6
Engineering:	\$ 1.1	\$ 1.0
Right of Way:	\$ 0.0	\$ 0.1
<b>Total:</b>	<b>\$ 7.5</b>	<b>\$ 6.2</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Recent Changes and Updates

Project Constructed in summer 2017.

### Project History

The existing bituminous needs resurfacing, and shoulders need to be graded in a few areas. Seven areas of snow drifting are being evaluated. A combination of ditch grading and snow fence is being proposed.

This project was moved to an earlier letting date. Ditch grading for snow drift control will be done with this project. Living snow fence will be implemented as a stand alone project in the Spring of 2018.

### Key Cost Estimate Assumptions

Job was let and awarded and is being constructed. The current estimate reflects low bid amount for the project. The bid price for bituminous was low.

### Project Risks

Project Constructed in summer 2017. Risks Retired.

### Schedule

Environmental Approval Date: 06/20/2016  
Municipal Consent Approval Date: Not Needed  
Geometric Layout Approval Date: Not Needed  
Construction Limits Established Date: 08/15/2015  
Original Letting Date: 02/23/2018  
Current Letting Date: 03/24/2017  
Construction Season: 2017  
Estimated Substantial Completion: October/2017



Minnesota Department of Transportation  
District 4  
1000 Hwy 10 W  
(218) 846-3600  
District Engineer: Jody Martinson  
Project Manager: Thomas Pace  
Revised Date: 12/15/2016

# PROJECT SUMMARY

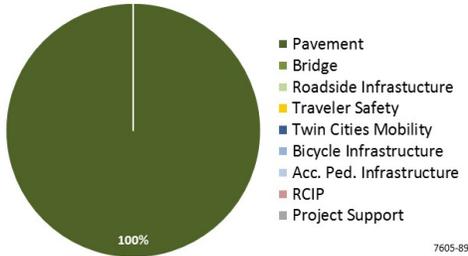
Hwy 12  
 Benson to Kerkhoven  
 Bridge NA  
 State Project No. 7605-89  
**Substantially Complete**



## Primary Purpose

Performance-based Need: Pavement condition

## Investment Category



## Project Description

Mill and overlay from County Road 25 east of Benson to Kerkhoven. Sidewalk and pedestrian ramp replacement in DeGraff, Murdock and Kerkhoven.

## Recent Changes and Updates

Construction complete in October 2016.

## Project History

Final scoping approval in February 2013. Scoping report complete.  
 Scheduled field walk to evaluate ADA needs.

Resurface Hwy 12 from Benson to Kerkhoven to restore ride quality.

ADA needs identified and are included in design. Failing culverts, non-compliant sidewalks and pedestrian ramps in DeGraff, Murdock and Kerkhoven were identified.

Project s let April 22, 2016 as an ELLA.  
 Scheduled to be complete by Oct. 1, 2016

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2013

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 5.4	\$ 3.2
Other Construction Elements:	\$ 0.5	\$ 0.2
Engineering:	\$ 1.0	\$ 0.5
Right of Way:	\$ 0.0	\$ 0.1
<b>Total:</b>	<b>\$ 6.9</b>	<b>\$ 4.0</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

Job was let and awarded and is being constructed. The current estimate reflects substantial completion of the project. The bid price for bituminous was low.

## Project Risks

Subgrade issue, which may include poor soils under the pavement, and a low area in Murdock.  
 ADA in DeGraff, Murdock & Kerkhoven considerations.

## Schedule

Environmental Approval Date: Not needed  
 Municipal Consent Approval Date: Not Needed  
 Geometric Layout Approval Date: Not Needed  
 Construction Limits Established Date: 08/15/2015  
 Original Letting Date: 01/26/2018  
 Current Letting Date: 04/22/2016  
 Construction Season: 2016  
 Estimated Substantial Completion: 10/01/2016



Minnesota Department of Transportation  
 District 4  
 1000 Hwy 10 W  
 (218) 846-3600

**District Engineer:** Jody Martinson  
**Project Manager:** Brian Bausman

**Revised Date:** 12/15/2016

## PROJECT SUMMARY

Hwy 12  
 Hwy 75 in Ortonville to Hwy 59  
 Bridge 794, 1060, 1121, 76012  
 State Project No. 0603-16  
 NA



### Primary Purpose

Performance-based Need: Pavement condition

### Investment Category

\*This project was designed and scoped before the current highway investment plan MnSHIP was developed, which breaks projects into investment categories.

### Project Description

Mill and inlay on Hwy 12 from Hwy 75 in Ortonville to the junction of Hwy 59. Replace box culverts and bridge improvements over the Pomme de Terre River.

### Recent Changes and Updates

Project is being considered for an up-scope to include shoulder widening and snow sloping throughout corridor. Also, pavement fix would be modified to a Reclaim.

### Project History

This project scoping document was completed in April 2016. Areas are being reviewed for possible snow trap mitigation.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2017

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 8.5	\$ 8.7
Other Construction Elements:	\$ 0.8	\$ 1.1
Engineering:	\$ 1.6	\$ 1.7
Right of Way:	\$ 0.1	\$ 0.3
<b>Total:</b>	<b>\$ 10.9</b>	<b>\$ 11.8</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

Date of estimate is June 20, 2017, inflated to year of construction. Pavement width will be widened with this project, which will result in the gravel shoulders being paved. This is an advanced construction project, which means that \$2 million of this project cost will be paid back in 2021. This allows construction to be done sooner.

### Project Risks

Identification of additional snow trap areas, possible contamination at the NW quadrant of Hwy 12 and Hwy 59, superelevation of the curve at the east end of the project, and possible additional drainage work. A benefit/cost analysis is being completed on the regrading for each snow trap location.

### Schedule

Environmental Approval Date: Pending Approval  
 Municipal Consent Approval Date: Not Needed  
 Geometric Layout Approval Date: Not needed  
 Construction Limits Established Date: Pending Approval  
 Original Letting Date: 11/22/2019  
 Current Letting Date: 01/22/2021  
 Construction Season: 2021  
 Estimated Substantial Completion: Oct. 2021



Minnesota Department of Transportation  
 District 4  
 1000 Hwy 10 W  
 (218) 846-3600

**District Engineer:** Jody Martinson  
**Project Manager:** Brian Bausman

**Revised Date:** 12/15/2016

# PROJECT SUMMARY

## Hwy 27

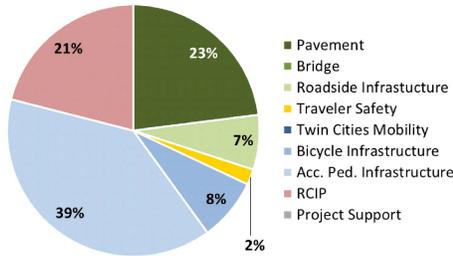
On Hwy 27 from CSAH 6 to Wheaton and on Hwy 75 from Dumont to the Mustinka River bridge  
 Bridge 8881, 8880, 2582,2340  
 State Project No. 7802-33



### Primary Purpose

Performance-based Need: Pavement condition

### Investment Category



### Project Description

Pavement will be rehabilitated for 10.2 miles on Hwy 27 from CSAH 6 to western city limits of Wheaton and 7.1 miles on Hwy 75 from Dumont to the Mustinka River bridge, excluding urban curb & gutter section in Wheaton.

### Recent Changes and Updates

Due to chapter 3 bond funds this project was upscaled from a mill & overlay to a cold Inplace Recycle on rural portions of TH 75/TH 27. Also included are centerline culverts and box culvert bridges on TH 27. The urban portion on TH 27 and TH 75 will now be included in the SP 7802-35 to be constructed in 2019. This project was also advanced on letting from 12-2018 to 4-2018 to be constructed in summer 2018 as an early let, late award.

### Project History

Bituminous cold in-place recycle followed by a bituminous overlay will be done on the pavement. Existing bituminous needs resurfacing on Hwy 27 and Hwy 75. Accessibility work in Wheaton will be done as a separate, stand alone project (SP 7802-35) that will include all surfacing work along curb and gutter sections.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2015

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 4.4	\$ 7.3
Other Construction Elements:	\$ 0.5	\$ 0.8
Engineering:	\$ 0.9	\$ 1.6
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 5.8</b>	<b>\$ 9.7</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

New estimate increased because it includes work on Hwy 75 that was previously a separate project (SP 7805-33). Estimate was done in 2017 using a 7% inflation rate for 2018.

Project estimate increased because it is now a Cold Inplace Recycle with additional Hydraulic work and advanced a construction season.

### Project Risks

No ROW acquisition will be allowed with this upscaled, advanced project. Box culvert designs by Central Office need to be done to meet letting. Environmental documents that include all hydraulic impacts need to be completed before letting date.

### Schedule

Environmental Approval Date: Pending Approval  
 Municipal Consent Approval Date: Not Needed  
 Geometric Layout Approval Date: Not Needed  
 Construction Limits Established Date: Pending  
 Original Letting Date: 1/25/2019  
 Current Letting Date: 04/27/2018  
 Construction Season: 2018  
 Estimated Substantial Completion: October 2018



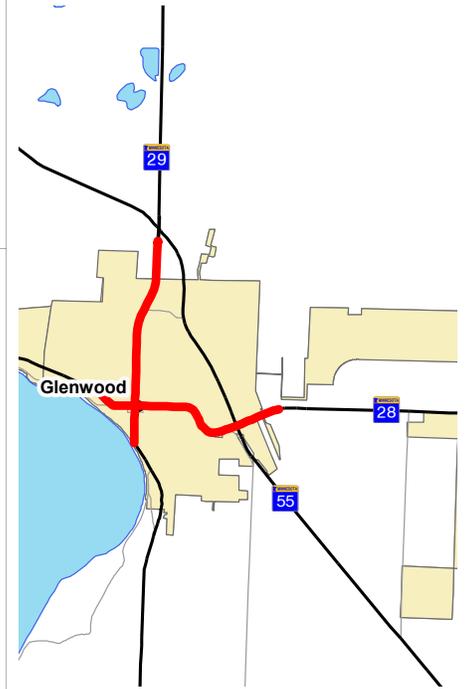
Minnesota Department of Transportation  
 District 4  
 1000 Hwy 10 W  
 (218) 846-3600

District Engineer: Jody Martinson  
 Project Manager: Thomas Pace

Revised Date: 12/15/2016

# PROJECT SUMMARY

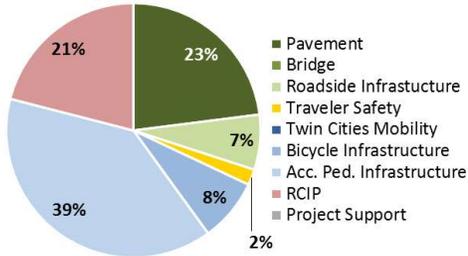
Hwy 28  
 Hwy 28, Hwy 29, Hwy 104 - Glenwood  
 Bridge NA  
 State Project No. 6103-32  
<http://www.dot.state.mn.us/D4/projects/Glenwood>



## Primary Purpose

Performance-based Need: Pavement

## Investment Category



## Project Description

4 miles of bituminous rehabilitation on Hwy 28, Hwy 29 & Hwy 104 in the City of Glenwood. The project also includes: ADA pedestrian ramps, sidewalk, signal system, six blocks of Complete Streets improvements and a realignment to address a flooding issue on Hwy 28 near the fairgrounds. Complete Streets is an approach to road planning and design that considers and balances the needs of all transportation users. In Glenwood this includes improvements and facilities for bicycles and pedestrians.

## Recent Changes and Updates

Final Design plans are near completion. Letting Date is moved back to Nov. 17, 2017.

## Project History

This project includes ADA, Complete Streets, bituminous overlay, and hydraulic flooding issues that need to be resolved.

Complete Streets portion of the project was approved, which includes improvements and facilities for bicycles and pedestrians. Hydraulic flooding issue mitigation design was approved. Predesign contract is complete. Final design contract is initiated. A project that was awarded Transportation Alternatives Program funding will be constructed in conjunction with this project. Municipal consent and the geometric layout for the project have been approved. Twelve blocks of Complete Streets improvements will be done in Glenwood.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2014

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 7.3	\$ 6.9
Other Construction Elements:	\$ 0.5	\$ 1.7
Engineering:	\$ 1.4	\$ 1.7
Right of Way:	\$ 0.0	\$ 0.1
<b>Total:</b>	<b>\$ 9.2</b>	<b>\$ 10.4</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

Estimate dated June 13, 2017 and was inflated to 2018. \$1 million City of Glenwood Complete Streets participation. \$100,000 City of Glenwood participation for grade raise for flooding issues. The grade raise by the fairgrounds has increased the cost of the project.

## Project Risks

City participation costs, ADA, sidewalk, access control. Cooperative agreement needs to be processed and signed. Limited Use Permit needs to be processed and signed. Detour Agreements need to be processed and signed. Contractor needs to be proactive in order to build the project in one construction season.

## Schedule

Environmental Approval Date: Pending Approval  
 Municipal Consent Approval Date: 6/29/2016  
 Geometric Layout Approval Date: 7/19/2016  
 Construction Limits Established Date: 6/3/2016  
 Original Letting Date: 02/16/2018  
 Current Letting Date: 11/17/2017  
 Construction Season: 2018  
 Estimated Substantial Completion: October/2018



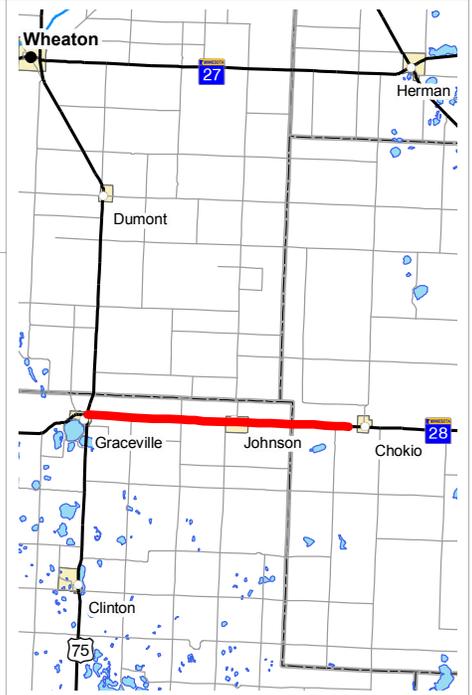
Minnesota Department of Transportation  
 District 4  
 1000 Hwy 10 W  
 (218) 846-3600

**District Engineer:** Jody Martinson  
**Project Manager:** Thomas Pace

**Revised Date:** 12/15/2016

## PROJECT SUMMARY

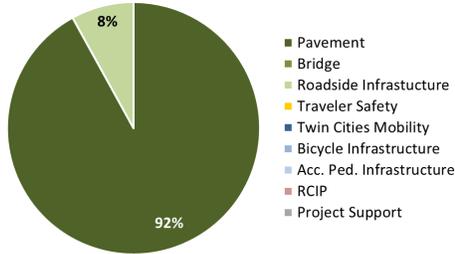
Hwy 28  
Hwy 75 to Chokio  
Bridge NA  
State Project No. 0606-11  
NA



### Primary Purpose

Performance-based Need: Pavement condition

### Investment Category



### Project Description

Milling, paving and hydraulic improvements of 12 miles from Hwy 75 in Graceville to Chokio.

### Recent Changes and Updates

Project is no longer an early let, late award project. Standard letting process will be followed.

### Project History

This project includes bituminous resurfacing. In place bituminous needs resurfacing. The previously reported 4 inches of standing water at one location on Hwy 28 was not confirmed according to MnDOT Maintenance personnel so it was removed as a risk from the estimate.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2015

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 3.5	\$ 3.3
Other Construction Elements:	\$ 0.5	\$ 0.4
Engineering:	\$ 0.7	\$ 0.8
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 4.7</b>	<b>\$ 4.6</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

Cost estimate was done in 2017 and inflated to 2018. Aggregate shoulder depth was increased from 1.5 inches to 2 inches. Bituminous costs were decreased due to market condition.

### Project Risks

All risks were retired.

### Schedule

Environmental Approval Date: Pending Approval  
Municipal Consent Approval Date: Not Needed  
Geometric Layout Approval Date: Not Needed  
Construction Limits Established Date: 6-20-2016  
Original Letting Date: 3/22/2018  
Current Letting Date: 3/23/2018  
Construction Season: 2018  
Estimated Substantial Completion: October/2018



Minnesota Department of Transportation  
District 4  
1000 Hwy 10 W  
(218) 846-3600

District Engineer: Jody Martinson  
Project Manager: Thomas Pace

Revised Date: 12/15/2016

## PROJECT SUMMARY

Hwy 28  
Starbuck to Glenwood  
Bridge NA  
State Project No. 6103-34  
NA



### Primary Purpose

Performance-based Need: Pavement condition

### Investment Category

\*This project was designed and scoped before the current highway investment plan MnSHIP was developed, which breaks projects into investment categories.

### Project Description

The project consists of 8 miles of bituminous milling, reclamation, and surfacing. Project also includes turn lane construction, hydraulic work and shoulder widening on Hwy 28.

### Recent Changes and Updates

It was determined to continue the typical section of SP 6103-32 to the west until Golf Course Road where the center left turn lanes are being constructed before beginning to widen shoulders to 8 feet. There is a concern for highwater tables and bad soils within the profile exiting Glenwood going west up over the hill.

The district is working with Minnewaska Township to turn back Silver Beach Road.

### Project History

This project includes bituminous milling, roadway reclamation, bituminous surfacing, shoulder widening and center left turn lane construction.

Multiple locations along the project to include off take ditches and centerline culverts need to be reviewed to correct hydraulic issues if possible.

Bypass lane added at CSAH 24.

Hydraulic Design required on the north side of TH 28 at Silver Beach road to temporarily store water during large rain events to reduce flooding which occurs on TH 28.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2015

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 6.8	\$ 5.5
Other Construction Elements:	\$ 1.4	\$ 1.2
Engineering:	\$ 1.4	\$ 1.2
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 9.6</b>	<b>\$ 7.9</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

Cost estimate was done in 2017 and inflated to 2019. An estimated lower inflation rate and the retirement of project contingency accounts for the reduction in the estimate.

### Project Risks

Environmental approval, right of way acquisition, detour agreement. Hydraulic risks are accounted for in the cost estimate as best as possible. The right of way acquisition will be necessary depending on the hydraulic design on the North side of TH 28 near Silver beach road. Highwater tables and bad soils west of Glenwood present a risk for construction.

### Schedule

Environmental Approval Date: Pending Approval  
Municipal Consent Approval Date: Not Needed  
Geometric Layout Approval Date: Approved  
Construction Limits Established Date: Approved  
Original Letting Date: 2020  
Current Letting Date: 2/22/2019  
Construction Season: 2019  
Estimated Substantial Completion: October/2019



Minnesota Department of Transportation  
District 4  
1000 Hwy 10 W  
(218) 846-3600

**District Engineer:** Jody Martinson  
**Project Manager:** Justin Knopf

**Revised Date:** 12/15/2016

# PROJECT SUMMARY

Hwy 29

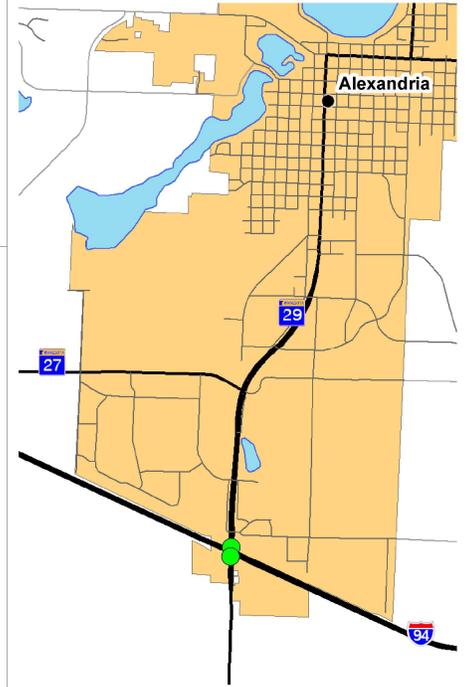
50th Avenue in Alexandria to County Road 28

Bridge 21813, 21814

State Project No. 2102-58

<http://www.dot.state.mn.us/d4/projects/alexix94hwy29/index.html>

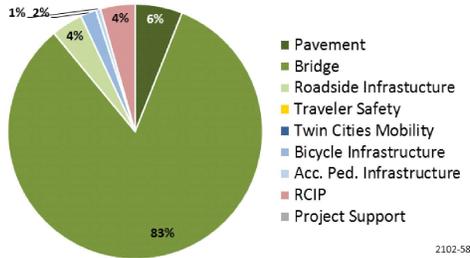
**Substantially Complete**



## Primary Purpose

Performance-based Need: Bridge Condition

## Investment Category



## Project Description

The project will replace bridges 21813 and 21814, which are part of the interchange in Alexandria for 2 miles on Hwy 29 over I-94. The project will replace the interchange and construct a four-lane expansion of Hwy 29 from 500 feet north of 50th Ave. to 0.4 miles south of County Road 28. This project is being done in collaboration with the city and county. A roundabout will be constructed on the south end of the project to improve safety.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2012

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 16.2	\$ 14.9
Other Construction Elements:	\$ 1.1	\$ 1.4
Engineering:	\$ 3.0	\$ 2.2
Right of Way:	\$ 0.1	\$ 1.9
<b>Total:</b>	<b>\$ 20.5</b>	<b>\$ 20.4</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Recent Changes and Updates

Majority of work was completed summer 2016. Some minor clean up work is being completed in 2017.

## Project History

The bridges were built in 1965 and are considered Structurally Deficient. The width and railings on the bridges are substandard. A value engineering study is complete. Bridges 21813 and 21814 are part of Chapter 152. This project will help economic development, mobility and safety.

Geometric layout was complete and signed. The right of way acquisition has begun. Two-span steel girder structure with tall abutments. Design plans are 50 percent complete. Traffic and noise studies are complete. Website is live. Public meeting in October 2012.

90% of the project plans were completed in August 2014. Construction started July 2015 and set to finish fall of 2016. Working on protection of utility line with Magellan Pipeline, which may carry over into 2017.

## Key Cost Estimate Assumptions

Job was let, awarded and constructed. The current estimate reflects substantially complete amount for the project.

## Project Risks

Project is substantially complete and all risks retired.

## Schedule

Environmental Approval Date: Not needed  
 Municipal Consent Approval Date: 05/28/2013  
 Geometric Layout Approval Date: 9/6/2013  
 Construction Limits Established Date: 09/06/2013  
 Original Letting Date: 01/22/2016  
 Current Letting Date: 02/27/2015  
 Construction Season: 2015/2016  
 Estimated Substantial Completion: November 2016



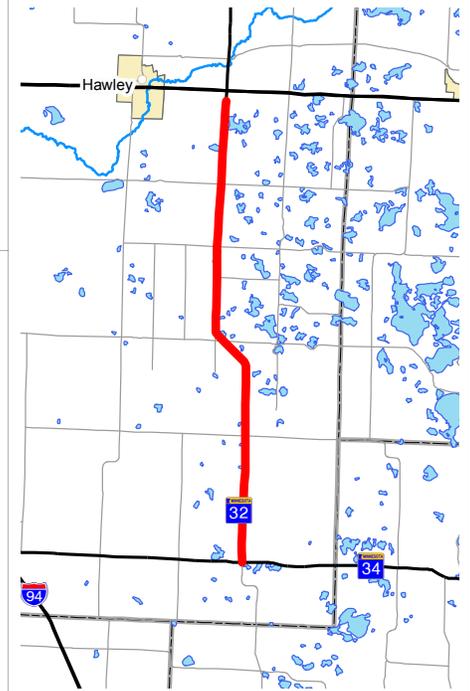
Minnesota Department of Transportation  
 District 4  
 1000 Hwy 10 W  
 (218) 846-3600

District Engineer: Jody Martinson  
 Project Manager: Bradley Cegla

Revised Date: 12/15/2016

## PROJECT SUMMARY

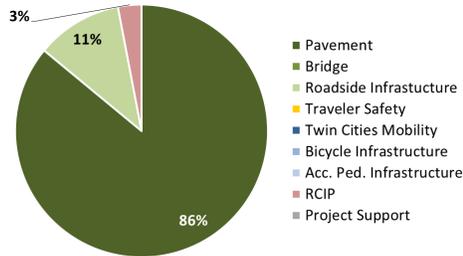
Hwy 32  
Hwy 34 to Hwy 10  
Bridge NA  
State Project No. 1402-19  
NA



### Primary Purpose

Performance-based Need: Pavement

### Investment Category



### Project Description

16 mile project from the junction of Hwy 34 to the junction of Hwy 10. Pavement will be rehabilitated, center line culverts and entrance pipes will be lined.

### Recent Changes and Updates

The project was constructed in summer 2017.

### Project History

Pavement needs resurfacing and various center line pipes need to be replaced or lined.

Project is being designed, limits established, and the right of way acquisition process is beginning. The pipes have been inspected and some will be lined rather than replaced.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2014

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 4.5	\$ 2.6
Other Construction Elements:	\$ 0.6	\$ 0.4
Engineering:	\$ 0.9	\$ 0.6
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 6.0</b>	<b>\$ 3.6</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

Job was let and awarded. The current estimate reflects low bid amount for the project. Bituminous prices were lower due to market conditions, which resulted in a lower bid. The baseline estimate had a higher inflation rate than the actual let amount.

### Project Risks

Project completed in summer 2017 and risks retired.

### Schedule

Environmental Approval Date: Pending Approval  
Municipal Consent Approval Date: Not Needed  
Geometric Layout Approval Date: Not Needed  
Construction Limits Established Date: 8/26/2016  
Original Letting Date: 3/24/2017  
Current Letting Date: 03/24/2017  
Construction Season: 2017  
Estimated Substantial Completion: October/2017



Minnesota Department of Transportation  
District 4  
1000 Hwy 10 W  
(218) 846-3600

**District Engineer:** Jody Martinson  
**Project Manager:** Thomas Pace

**Revised Date:** 12/15/2016

# PROJECT SUMMARY

Hwy 34  
 Hwy 9 in Barnesville to Hwy 59 at Dunvilla  
 Bridge NA  
 State Project No. 1404-17

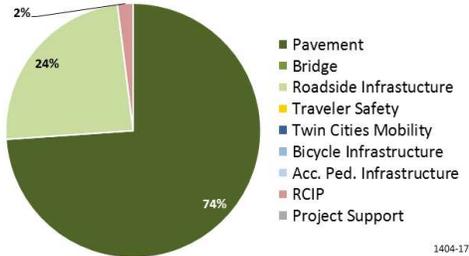
**Substantially Complete**



## Primary Purpose

Performance-based Need: Pavement condition

## Investment Category



## Project Description

19-mile pavement rehabilitation project from Hwy 9 in Barnesville to Hwy 59 at Dunvilla. The project also includes shoulder work, installing rumble strips and culvert replacement.

## Recent Changes and Updates

Project is substantially complete.

## Project History

This project was initiated because intense annual maintenance was required to repair cracks, rutting and other deficiencies. It also appears that gravel truck traffic increased from Hwy 32 west, resulting in more rapid deterioration of the roadway. The project was scoped in May 2011. The project scope was expanded to include from I-94 to Hwy 9 in Barnesville so that this last stretch of highway 34 would be rehabilitated along with highway 34 to the east.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2011

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 8.1	\$ 6.6
Other Construction Elements:	\$ 0.8	\$ 1.1
Engineering:	\$ 1.7	\$ 0.5
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 10.6</b>	<b>\$ 8.2</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

The baseline estimate was adjusted to 2015 year of construction using an inflation rate of 5%. The current estimate is substantial completion of the project. The baseline estimate had a higher inflation rate than was realized in the actual let amount.

## Project Risks

Project is substantially complete and all risks retired.

## Schedule

Environmental Approval Date: 01/31/2014  
 Municipal Consent Approval Date: Not Needed  
 Geometric Layout Approval Date: Not Needed  
 Construction Limits Established Date: 06/07/2015  
 Original Letting Date: 05/20/2011  
 Current Letting Date: 02/27/2015  
 Construction Season: 2015  
 Estimated Substantial Completion: August/2015



Minnesota Department of Transportation  
 District 4  
 1000 Hwy 10 W  
 (218) 846-3600

**District Engineer:** Jody Martinson  
**Project Manager:** Tom Lundberg

**Revised Date:** 12/15/2016

## PROJECT SUMMARY

Hwy 59

From the junction of Hwy 28 to the north of the Stevens County line

Bridge NA

State Project No. 7506-17

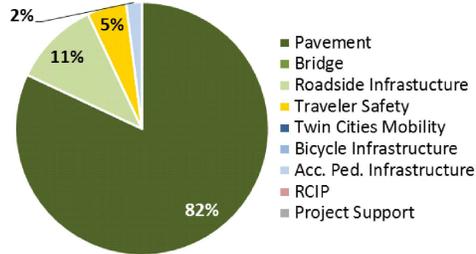
**Substantially Complete**



### Primary Purpose

Performance-based Need: Pavement

### Investment Category



### Project Description

The project consists of a concrete overlay from the junction of Hwy 28 to north of the Stevens County line and at the intersection of Hwy 59/28.

### Recent Changes and Updates

Project was complete fall of 2016.

### Project History

This project was programmed to correct joints in the pavement that were deteriorating faster than anticipated and will support the implementation of a thin concrete overlay as an innovative fix. The letting was advanced from 2018 to 2016.

Project designs are almost done. Testing found contaminated material at the Hwy 28/59 intersection.

Project is set to be complete fall of 2016.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2014

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 6.3	\$ 5.3
Other Construction Elements:	\$ 0.6	\$ 0.6
Engineering:	\$ 1.2	\$ 0.6
Right of Way:	\$ 0.0	\$ 0.1
<b>Total:</b>	<b>\$ 8.1</b>	<b>\$ 6.6</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

The current estimate reflects the substantial completion amount for the project.

### Project Risks

The concrete overlays are a new process and problems may be encountered after completion.

### Schedule

Environmental Approval Date: Pending Approval  
 Municipal Consent Approval Date: Not Needed  
 Geometric Layout Approval Date: 04/30/2015  
 Construction Limits Established Date: 04/30/2015  
 Original Letting Date: 03/23/2018  
 Current Letting Date: 01/18/2015  
 Construction Season: 2016  
 Estimated Substantial Completion: 10/01/2016



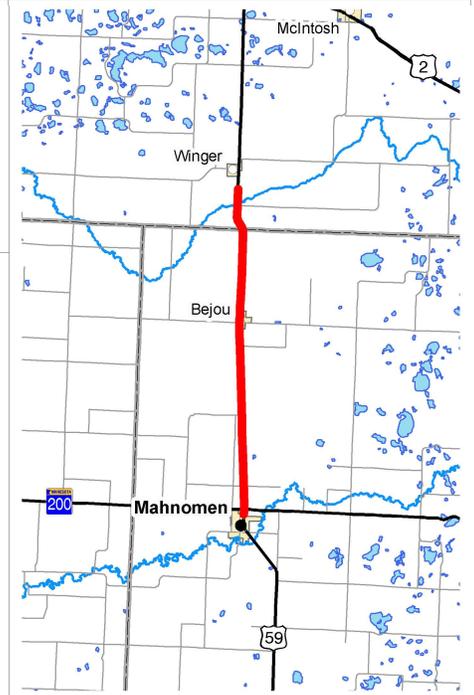
Minnesota Department of Transportation  
 District 4  
 1000 Hwy 10 W  
 (218) 846-3600

District Engineer: Jody Martinson  
 Project Manager: Brad Cegla

Revised Date: 12/15/2016

# PROJECT SUMMARY

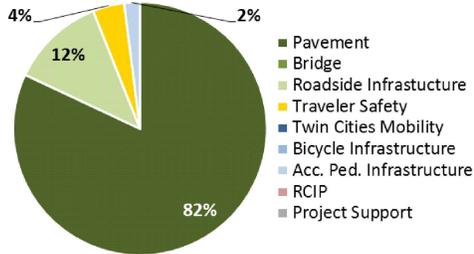
Hwy 59  
 South of the Buffalo River Bridge to Winger  
 Bridge NA  
 State Project No. 4404-13, 0305-34, &, 6008-15  
 NA



## Primary Purpose

Performance-based Need: Pavement

## Investment Category



## Project Description

36-mile project from south of the Buffalo River bridge to Winger. Pavement will be rehabilitated, centerline culverts will be replaced and centerline and edgeline rumble stripes will be installed. ADA work in Ogema will be done. One mile of continuous center left turn lane will be constructed in Mahanomen along with a trail from Washington Ave. to the Shooting Star Casino entrance.

## Recent Changes and Updates

Construction is underway in 2017.

## Project History

Pavement needs resurfacing, and hydraulic pipes need to be replaced. Frost heaves and rip rap at various areas to be corrected. District 2 coordination.

Hwy 200 turn lanes to be constructed under SP 0305-34.

Two projects, SP 0305-34 and SP 4404-13, on Hwy 59 were combined into one project for construction in 2017. This project extends into District 2 under SP 6008-15. Design is 30% complete. One mile of continuous left turn lane was added in Mahanomen.

Design is 100% complete. One mile of continuous left turn lane was added in Mahanomen along with a half mile of trail to accommodate pedestrians.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2014

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 4.7	\$ 9.8
Other Construction Elements:	\$ 0.5	\$ 1.1
Engineering:	\$ 1.0	\$ 2.2
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 6.2</b>	<b>\$ 13.2</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

The current estimate reflects low bid amount for the project.

## Project Risks

All permits are obtained.

## Schedule

Environmental Approval Date: 7/15/2016  
 Municipal Consent Approval Date: Not Needed  
 Geometric Layout Approval Date: 8/25/2016  
 Construction Limits Established Date: 1/20/2016  
 Original Letting Date: 02/16/2018  
 Current Letting Date: 12/16/2018  
 Construction Season: 2017  
 Estimated Substantial Completion: October 2017



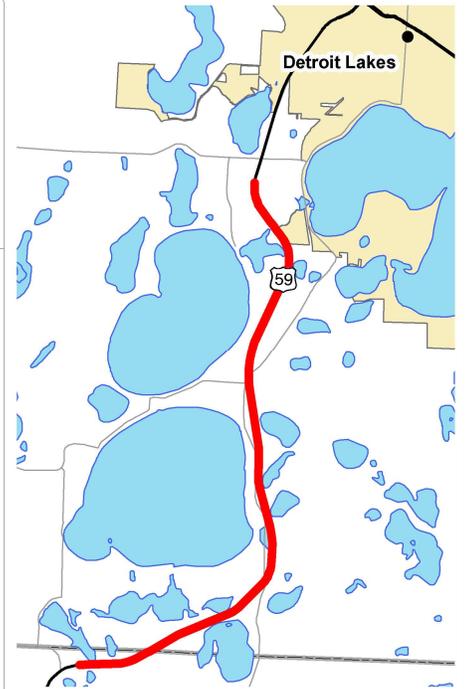
Minnesota Department of Transportation  
 District 4  
 1000 Hwy 10 W  
 (218) 846-3600

District Engineer: Jody Martinson  
 Project Manager: Shiloh Wahl

Revised Date: 12/15/2016

## PROJECT SUMMARY

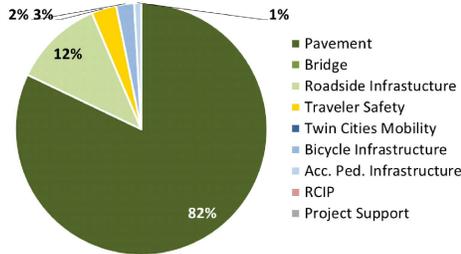
Hwy 59  
North of CSAH 20 to south of Willow Street  
Bridge NA  
State Project No. 0304-37  
NA



### Primary Purpose

Performance-based Need: Pavement condition

### Investment Category



### Project Description

Resurfacing and safety improvement project from CSAH 20 in Otter Tail County to Willow Street in Detroit Lakes. Left turn lanes will be added at CSAH 17 in Becker County.

### Recent Changes and Updates

Project has been selected for an up-scope to reclaim in 2018.

### Project History

Project needed as a result of low ride quality and above average crash history. Yearly spending for patching and crack filling will grow if project is not completed.

Working on geometric layout and other pre-design activities. Letting date revised from 2020 to 2018 construction.

Geometric layout is complete and construction limits established.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2015

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 3.7	\$ 5.3
Other Construction Elements:	\$ 0.3	\$ 0.43
Engineering:	\$ 0.7	\$ 1.1
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 4.7</b>	<b>\$ 6.9</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

Estimate was done in 2017 and inflated to 2018. Changing the work on this project to a reclaim has resulted in a higher estimate.

### Project Risks

Project risks include additional aggregate shouldering, ADA update at CR 6, ADA at Sauer Lake Rest Area, upgrades to the pedestrian push button on the signal system at CR 6 and additional hydraulics issues. These risks were accounted for as contingencies in the estimate.

### Schedule

Environmental Approval Date: Pending Approval  
Municipal Consent Approval Date: Not Needed  
Geometric Layout Approval Date: 12/22/2015  
Construction Limits Established Date: 12/22/2015  
Original Letting Date: 9/21/2018  
Current Letting Date: 5/18/2018  
Construction Season: May 2018 to October 2018  
Estimated Substantial Completion: October/2018



Minnesota Department of Transportation  
District 4  
1000 Hwy 10 W  
(218) 846-3600

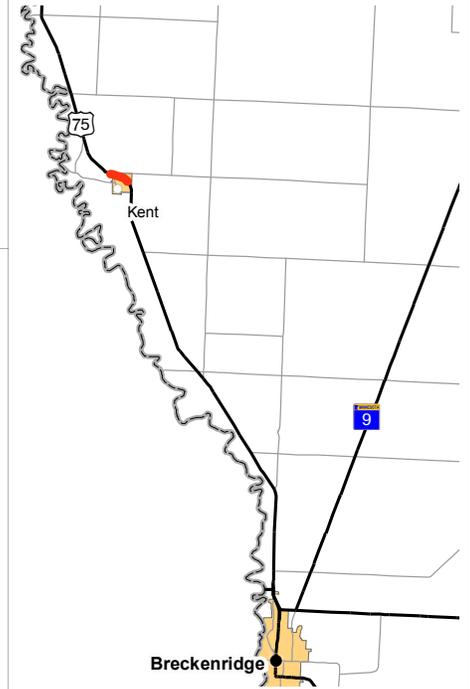
District Engineer: Jody Martinson  
Project Manager: Brian Bausman

Revised Date: 12/15/2016

## PROJECT SUMMARY

Hwy 75  
Near Kent  
Bridge 5185, &, 5186  
State Project No. 8408-44  
<http://www.dot.state.mn.us/D4/Projects/Hwy75kent/>

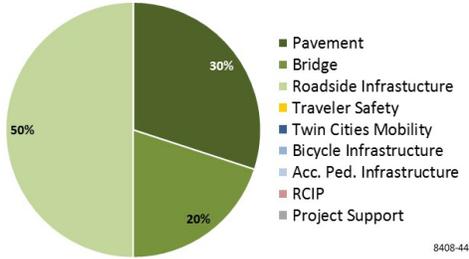
**Substantially Complete**



### Primary Purpose

Performance-based Need: Bridge & Roadside Infrastructure Condition

### Investment Category



### Project Description

Hwy 75 will be realigned away from the flood plain. A new bridge over Whiskey Creek will be constructed. Additionally, a new bridge over BNSF railroad will be constructed. MnDOT has excess right of way that will be released.

### Recent Changes and Updates

Project completed in 2016.

### Project History

Bridge 5186 is in poor condition and needs to be replaced. Annual flooding due to spring melt and large rain events caused Hwy 75 to be detoured. This project will address safety and mobility issues caused by flooding.

Letting moved from 2016 to 2015. The current estimate increased due to longer bridge lengths for both bridges as well as turnback costs for a portion of the existing Hwy 75. Environmental issues are being addressed, including ponding, which also increased costs.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2012

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 7.6	\$ 9.7
Other Construction Elements:	\$ 0.6	\$ 0.7
Engineering:	\$ 1.5	\$ 1.7
Right of Way:	\$ 0.7	\$ 0.9
<b>Total:</b>	<b>\$ 10.4</b>	<b>\$ 13.0</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

Project is let and being constructed. Construction completion on time and within budget. The current estimate reflects substantial completion of the project.

### Project Risks

Project completed in 2016.

### Schedule

Environmental Approval Date: 11/05/2014  
Municipal Consent Approval Date: 06/09/2013  
Geometric Layout Approval Date: 4/24/2013  
Construction Limits Established Date: 04/14/2013  
Original Letting Date: 03/28/2000  
Current Letting Date: 02/27/2015  
Construction Season: 2015/2016  
Estimated Substantial Completion: Oct. 2016



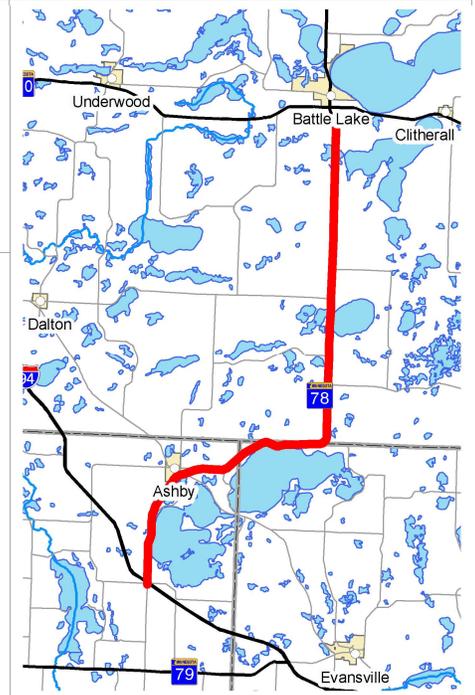
Minnesota Department of Transportation  
District 4  
1000 Hwy 10 W  
(218) 846-3600

**District Engineer:** Jody Martinson  
**Project Manager:** Thomas Pace

**Revised Date:** 12/15/2016

## PROJECT SUMMARY

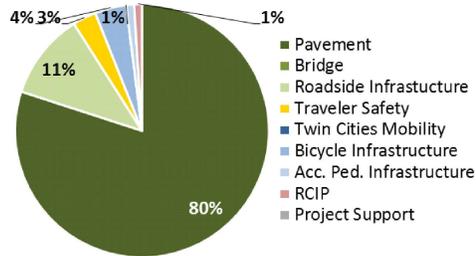
Hwy 78  
I-94 to Battle Lake  
Bridge NA  
State Project No. 5619-11  
NA



### Primary Purpose

Performance-based Need: Pavement

### Investment Category



### Project Description

Mill and overlay project on Hwy 78 from I-94 to Battle Lake.

### Recent Changes and Updates

Project design is complete and is on track for letting in November 2017.

### Project History

This project was designed to correct deteriorating road surface.  
Scoping document approved February 2014.

Coordinating with Battle Lake and Ashby on a possible trail between the two communities.  
Working on right of way process and starting design of project.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2014

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 7.4	\$ 6.8
Other Construction Elements:	\$ 0.9	\$ 1.0
Engineering:	\$ 1.4	\$ 1.5
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 9.7</b>	<b>\$ 9.9</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

Estimate dated June 13, 2017 to 2018 for construction.

### Project Risks

No major risks noted.

### Schedule

Environmental Approval Date: Pending Approval  
Municipal Consent Approval Date: Not Needed  
Geometric Layout Approval Date: Not Needed  
Construction Limits Established Date: Pending Approval  
Original Letting Date: 11/01/2017  
Current Letting Date: 11/01/2017  
Construction Season: 2018  
Estimated Substantial Completion: October/2018



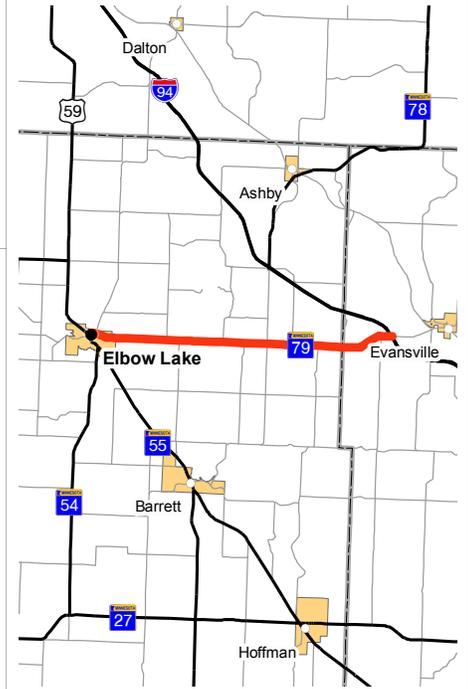
Minnesota Department of Transportation  
District 4  
1000 Hwy 10 W  
(218) 846-3600

District Engineer: Jody Martinson  
Project Manager: Tom Lundberg

Revised Date: 12/15/2016

# PROJECT SUMMARY

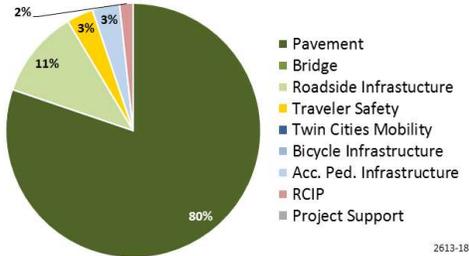
Hwy 79  
 Elbow Lake to Hwy 94  
 Bridge 21801, &, 21802  
 State Project No. 2613-18  
 NA  
**Substantially Complete**



## Primary Purpose

Performance-based Need: Pavement

## Investment Category



2613-18

## Project Description

Resurfacing project for 12 miles from Hwy 59 in Elbow Lake to I-94. The project also includes ADA work, replacing culverts, updating guardrail, and installing rumble strips.

## Recent Changes and Updates

Construction of this project was completed June 2016.

## Project History

The western limit was extended to include a section of Hwy 59. ADA work will be included in the project. Elbow Lake street lighting may be added to the project.  
 The county could include a bike trail, which would add environmental impacts and possibly effect timing. Utilities will handle hydraulics prior to the project start date.  
 Paving was added on TH 55 in the City of Elbow Lake and later removed along with work on Hwy 59 and a portion of TH 79 due to accessibility work needed in Elbow Lake.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2012

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 4.5	\$ 3.3
Other Construction Elements:	\$ 0.5	\$ 0.7
Engineering:	\$ 0.9	\$ 0.3
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 5.9</b>	<b>\$ 4.3</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

Job was constructed. The current estimate reflects substantial completion of the project. The baseline estimate had a higher inflation rate than was realized in the actual let amount.

## Project Risks

Risks retired.

## Schedule

Environmental Approval Date: 12/3/2014  
 Municipal Consent Approval Date: Not Needed  
 Geometric Layout Approval Date: Not Needed  
 Construction Limits Established Date: 07/29/2015  
 Original Letting Date: 03/28/2016  
 Current Letting Date: 11/20/2015  
 Construction Season: 2016  
 Estimated Substantial Completion: Oct. 2016



Minnesota Department of Transportation  
 District 4  
 1000 Hwy 10 W  
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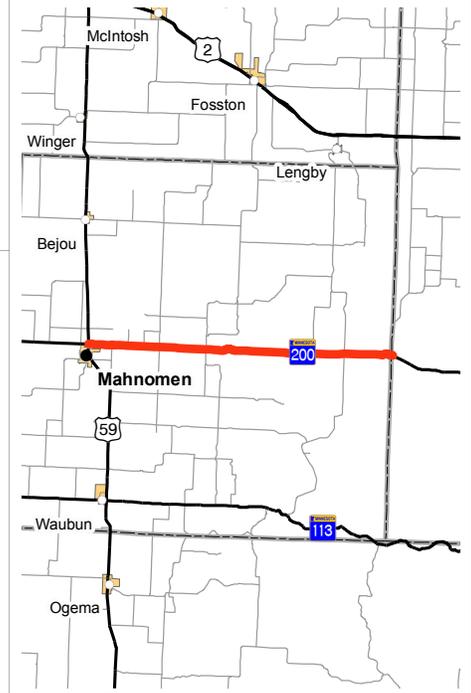
**District Engineer:** Jody Martinson  
**Project Manager:** Lori Vanderhider

**Revised Date:** 12/15/2016

# PROJECT SUMMARY

Hwy 200  
 Hwy 59 to east Mahnomen County line  
 Bridge NA  
 State Project No. 4402-19

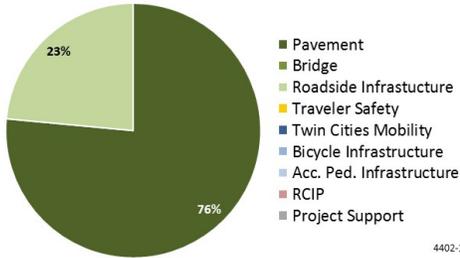
**Substantially Complete**



## Primary Purpose

Performance-based Need: Pavement condition

## Investment Category



4402-19

## Project Description

20-mile project from Hwy 59 in Mahnomen to the Mahnomen/Clearwater County line. Pavement will be rehabilitated, centerline culverts will be replaced, flood-prone areas regraded, guardrail replaced and edge rumbles replaced.

## Recent Changes and Updates

Project completed in 2016.

## Project History

In place pavement needs resurfacing. Segment has overland flooding due to spring melt and heavy rains. A raised grade to mitigate flooding was added, which resulted in increased project costs.

Drainage areas west of Hwy 59 require ditch cleaning and pipe work. District 2 is doing the design and will do the contract administration for this project.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2012

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 6.2	\$ 5.5
Other Construction Elements:	\$ 0.4	\$ 0.6
Engineering:	\$ 1.2	\$ 0.5
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 7.8</b>	<b>\$ 6.6</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

Job was let, awarded and constructed. The current estimate reflects substantial completion amount for the project.

## Project Risks

Project completed in 2016. Risks retired.

## Schedule

Environmental Approval Date: Pending Approval  
 Municipal Consent Approval Date: Not Needed  
 Geometric Layout Approval Date: Not Needed  
 Construction Limits Established Date: 06/08/2014  
 Original Letting Date: 03/25/2016  
 Current Letting Date: 12/18/2015  
 Construction Season: 2016  
 Estimated Substantial Completion: Oct. 2016



Minnesota Department of Transportation  
 District 4  
 1000 Hwy 10 W  
 (218) 846-3600

**District Engineer:** Jody Martinson  
**Project Manager:** Thomas Pace

**Revised Date:** 12/15/2016

# PROJECT SUMMARY

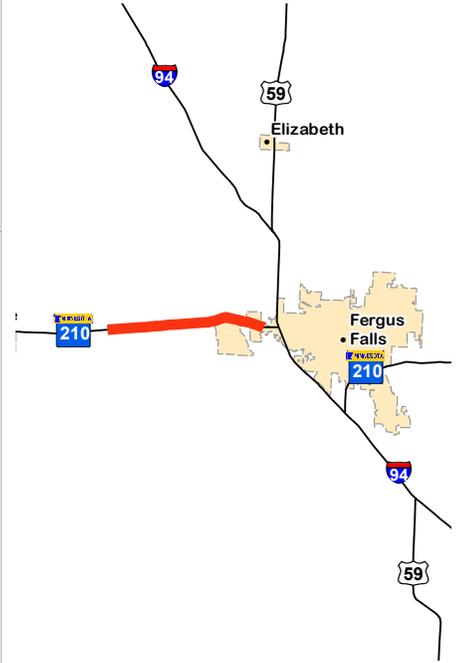
Hwy 210

1.8 miles East of Wilkin County Line to 0.4 miles West of I-94

Bridge NA

State Project No. 5601-33

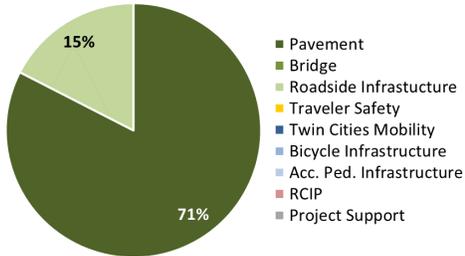
NA



## Primary Purpose

Performance-based Need: Pavement

## Investment Category



## Project Description

Roadway Rehabilitation . May extend turnlane and guardrail lengths for recent increase in speed limit. Probable snow fence and ditching for control of blowing and drifting snow.

## Recent Changes and Updates

Risk for relocation of road closure gate was retired. Gate will remain in its present location.

Blowing and drifting snow control measures benefit/cost was completed. Snow control measures were determined to be cost effective.

Risk for paving local roads to the RR was retired. Some of the roads will be paved to the RR based on input from the road authorities. Letting date was advanced due to poor pavement condition.

## Project History

This project is needed to address higher than normal maintenance patching (3 times per year compared to once every 5 years).

Original project scoping was completed December 2015.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2016

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 4.4	\$ 4.3
Other Construction Elements:	\$ 0.5	\$ 0.4
Engineering:	\$ 0.9	\$ 0.9
Right of Way:	\$ 1.0	\$ 0.6
<b>Total:</b>	<b>\$ 6.8</b>	<b>\$ 6.2</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

Estimate completed in 2017 using inflation rate of 21% for construction year 2020. Estimate was reduced due to retiring the risk for relocating the road closure gates. Price for bituminous was low due to market trends.

## Project Risks

Subgrade treatments

## Schedule

Environmental Approval Date: Pending Approval  
 Municipal Consent Approval Date: Not Needed  
 Geometric Layout Approval Date: Not Needed  
 Construction Limits Established Date: Pending Approval  
 Original Letting Date: 11-22-2019  
 Current Letting Date: 03-22-2019  
 Construction Season: 2020  
 Estimated Substantial Completion: November 2020



Minnesota Department of Transportation  
 District 4  
 1000 Hwy 10 W  
 (218) 846-3600

**District Engineer:** Jody Martinson  
**Project Manager:** Lori Vanderhider

**Revised Date:** 12/15/2016

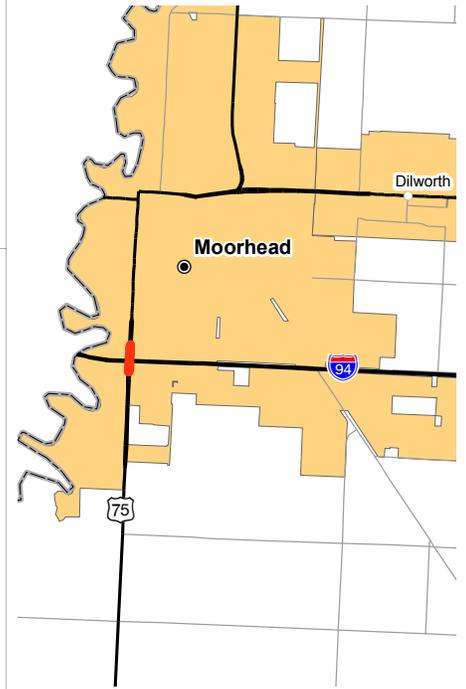
# PROJECT SUMMARY

I-94

I-94 and Hwy 75 interchange  
 Bridge 14813, 14814, 14X11, 14X12  
 State Project No. 1406-66

<http://www.dot.state.mn.us/d4/projects/moorhead/>

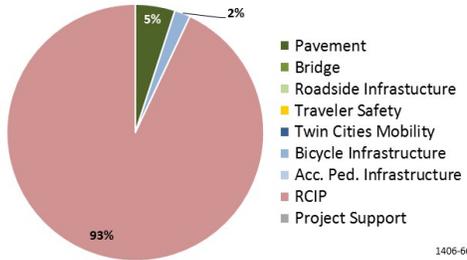
**Substantially Complete**



## Primary Purpose

Regional & Community Improvement Priority

## Investment Category



## Project Description

Reconstruct the Hwy 75 interchange over I-94 in Moorhead. Both eastbound and westbound auxiliary lanes on I-94 will be extended to 20th Street. Bike and pedestrian traffic will be addressed with the bridge construction. ADA and guardrail will meet standards. Signals will be installed and hydraulic issues addressed.

## Recent Changes and Updates

Project is complete.

## Project History

Final Design was complete in July 2015 and is now pending federal approval for letting. The southerly project limits were shortened from 40th Ave to 35th Ave, which eliminates the new signal at 37th Ave. That section is now programmed under SP 1406-74 with a letting in 2017. Cooperative Agreement is pending with the City of Moorhead for signals, lighting and a multiuse trail. Utility agreements are pending due to relocations within Interstate Right of Way. The letting was moved to September 2015. Municipal consent is now needed due to signal replacements at 37th, 30th and 24th Ave. The newly designed Interchange is a lower cost option compared to the original plan. This project was the preferred alternative of the Hwy 75 Corridor Transportation Study completed in 2008. The project was let on Sept. 25, 2015, but the low bid was rejected because it did not meet DBE goals. The project was re-let on Jan. 29, 2016. The bid amount was nearly \$2 million over the engineers estimate, but it was awarded and approved.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2012

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 15.0	\$ 13.6
Other Construction Elements:	\$ 1.2	\$ 0.7
Engineering:	\$ 3.0	\$ 1.4
Right of Way:	\$ 0.2	\$ 0.0
<b>Total:</b>	<b>\$ 19.4</b>	<b>\$ 15.7</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

Job was constructed in 2016. The current estimate reflects substantial completion amount of the project.

## Project Risks

Constructing under traffic may increase costs. Staging was developed to expedite construction.

## Schedule

Environmental Approval Date: 8/3/2015  
 Municipal Consent Approval Date: Not Needed  
 Geometric Layout Approval Date: 10/23/2015  
 Construction Limits Established Date: 10/23/2015  
 Original Letting Date: 6/24/2016  
 Current Letting Date: 1/29/2016  
 Construction Season: May - Oct 2016  
 Estimated Substantial Completion: Oct. 2016



Minnesota Department of Transportation  
 District 4  
 1000 Hwy 10 W  
 (218) 846-3600  
**District Engineer: Jody Martinson**  
**Project Manager: Seth Yliniemi**  
**Revised Date: 12/15/2016**

# PROJECT SUMMARY

I-94

At various locations on I-94 from Fergus Falls to Osakis

Bridge 21801, 21802, 21803, 21804, 21809, 21810, 21812, 9691, 9692, 21821

State Project No. 2180-109, 2180-108, 5680-138

NA



## Primary Purpose

Performance-based Need: Pavement and Bridge Condition

## Investment Category

\*This project was designed and scoped before the current highway investment plan MnSHIP was developed, which breaks projects into investment categories.

## Project Description

Replace the bridge decks on bridges over I-94 at County Road 88 near Fergus Falls (SP 5680-138), Highway 79 near Evansville, and Highway 114 near Alexandria (SP 2180-105) and replace the bridge deck on Highway 27 over Interstate 94 near Osakis (SP 2180-108). Provide new concrete pavement surface in east bound and west bound directions from Highway 114 to 79 (SP 2180-109 & SP 2180-110).

## Recent Changes and Updates

Construction of this project began in August 2017.

## Project History

Combining these six projects into one will limit the impact to the traveling public to two construction seasons.

The bridge decks and concrete paving projects were originally to be completed in 6 separate contracts over multiple years. Combining all bridge deck replacements and the new concrete pavement into one project for two construction seasons will minimize the impacts to the traveling public.

The seven bridges were in three different areas, Fergus Falls, Evansville and Osakis. Project split into three separate projects, two bridges near Fergus Falls, one bridge near Osakis and the four bridges near Evansville with a concrete overlay on both EB and WB I94 between the bridge locations. The bridges near Fergus Falls were completed in 2016. The bridge near Osakis will be let fall 2016 with construction in 2017. The other four bridges and overlay, the plans are 95% complete and are waiting for funding.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 11-01-2015

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 42.0	\$ 26.4
Other Construction Elements:	\$ 2.5	\$ 2.9
Engineering:	\$ 3.8	\$ 5.9
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 48.3</b>	<b>\$ 35.2</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

Job is being constructed. The current estimate reflects low bid amounts for the three projects. Combining the work into three projects resulted in low bids for the work.

## Project Risks

We reduced the impact to the cable median guardrail in the area of the concrete overlay. This may be difficult as the guardrail is close to the pavement and limits the contractor's working area. The major portion of the work (four bridges and the concrete overlay) is not funded. Delaying the funding will impact the estimate due to inflation.

## Schedule

Environmental Approval Date: 6/15/2016  
 Municipal Consent Approval Date: Not Needed  
 Geometric Layout Approval Date: Not Needed  
 Construction Limits Established Date: Not Needed  
 Original Letting Date: 3/16/2016  
 Current Letting Date: 3/16/2016  
 Construction Season: May 2017 - October 2018  
 Estimated Substantial Completion: Fall/2018



Minnesota Department of Transportation  
 District 4  
 1000 Hwy 10 W  
 (218) 846-3600

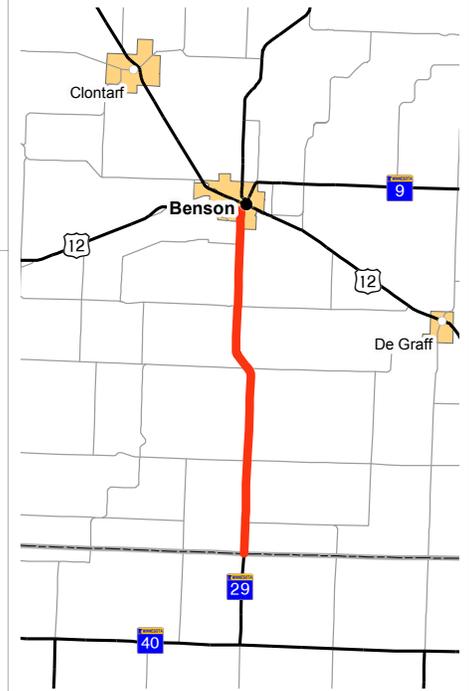
**District Engineer:** Jody Martinson  
**Project Manager:** Chris Roy

**Revised Date:** 12/15/2016

# PROJECT SUMMARY

Hwy 29  
 Hwy 40 to Benson  
 Bridge 6550, 6551, and, 6552  
 State Project No. 7607-29

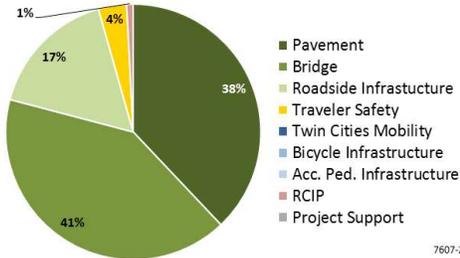
NA  
**Substantially Complete**



## Primary Purpose

Performance-based Need: Bridge & Pavement Condition

## Investment Category



## Project Description

Bituminous resurfacing for 14 miles from Benson to Hwy 40. Bridges 6550, 6551 & 6552 will be replaced and grading will be done to tie into the bridges. Culverts that are in poor condition will be replaced.

## Recent Changes and Updates

Project is substantially complete as of fall 2014.

## Project History

Because bridge widening is needed to bring the bridges up to current standards, replacement is the only feasible option. Pavement deterioration rates exceeded historic declines. Bridge Replacement 6552 is part of Chapter 152. A consultant was hired and is working on design plans. Bridges 6550 and 6551 were evaluated and replaced with box culverts. Bridge 6552 will be replaced with a bridge.

The winter was extremely hard on the pavement condition. The letting was moved up to address this issue.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2011

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 7.3	\$ 6.6
Other Construction Elements:	\$ 0.9	\$ 0.5
Engineering:	\$ 1.5	\$ 0.4
Right of Way:	\$ 0.1	\$ 0.0
<b>Total:</b>	<b>\$ 9.8</b>	<b>\$ 7.6</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

Project is substantially complete as of fall 2014. The bid price for the culverts and bridge were less than expected resulting in cost savings.

## Project Risks

No remaining risks.

## Schedule

Environmental Approval Date: 03/13/2014  
 Municipal Consent Approval Date: Not Needed  
 Geometric Layout Approval Date: Not Needed  
 Construction Limits Established Date: 10/18/2013  
 Original Letting Date: 03/24/2006  
 Current Letting Date: 05/16/2014  
 Construction Season: 2014  
 Estimated Substantial Completion: November/ 2014



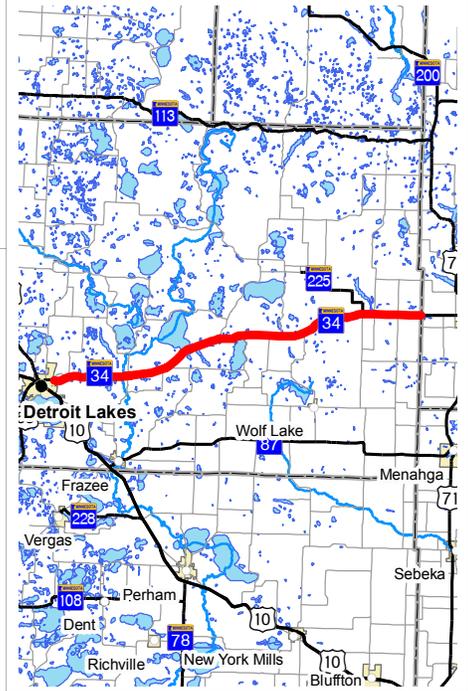
Minnesota Department of Transportation  
 District 4  
 1000 Hwy 10 W  
 (218) 846-3600

**District Engineer:** Jody Martinson  
**Project Manager:** Dan Kuhn/Bradley Cegla  
**Revised Date:** 12/15/2016

## PROJECT SUMMARY

Hwy 34  
 Various Passing Lanes from Detroit Lakes to Akeley  
 Bridge NA  
 State Project No. 0303-64  
[www.dot.state.mn/d4/projects/hwy34](http://www.dot.state.mn/d4/projects/hwy34)

Substantially Complete



### Primary Purpose

Performance-based Need: Interregional Corridor Mobility

### Investment Category

\*This project was designed and scoped before the current highway investment plan MnSHIP was developed, which breaks projects into investment categories.

### Project Description

The project includes spot improvements, passing lane improvements, and intersection improvements on Hwy 34 from Detroit Lakes to Akeley.

### Recent Changes and Updates

Project is substantially complete. Poor soils led to increases in cost over the estimated.

### Project History

This project is part of the Corridors of Commerce Program and was fast-tracked starting November 2013 with design and passing lanes completed in fall 2015.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2013

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 6.8	\$ 7.9
Other Construction Elements:	\$ 0.6	\$ 0.7
Engineering:	\$ 1.5	\$ 1.3
Right of Way:	\$ 0.0	\$ 0.1
<b>Total:</b>	<b>\$ 8.9</b>	<b>\$ 10.0</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

Project is substantially complete.

### Project Risks

Short turn around for design and letting. Permits acquired in time due to compressed time schedule. Hydraulics, poor soils beneath the pavement and possible existing contamination of soil on the project.

### Schedule

Environmental Approval Date: 03/10/2014  
 Municipal Consent Approval Date: Not Needed  
 Geometric Layout Approval Date: Dec 2013  
 Construction Limits Established Date: 12/01/2013  
 Original Letting Date: 06/06/2014  
 Current Letting Date: 06/27/2014  
 Construction Season: 2014/2015  
 Estimated Substantial Completion: October/2015



Minnesota Department of Transportation  
 District 4  
 1000 Hwy 10 W  
 (218) 846-3600

**District Engineer:** Jody Martinson  
**Project Manager:** Tom Lundberg

**Revised Date:** 12/15/2016

## PROJECT SUMMARY

Hwy 75  
Hwy 10 to north Clay County line  
Bridge NA  
State Project No. 1407-25

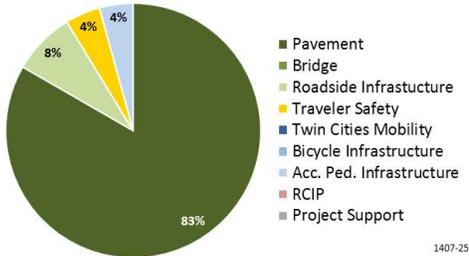
**Substantially Complete**



### Primary Purpose

Performance-based Need: Pavement condition

### Investment Category



### Project Description

This project consists of pavement resurfacing, culvert replacement and turn lane construction for 19 miles from Hwy 10 in Moorhead to the Clay/Norman County line.

### Recent Changes and Updates

Project is substantially complete.

### Project History

In place pavement needs resurfacing and was moved forward due to rapid decline of pavement conditions. Hydraulic/drainage concerns need to be addressed. Project is designed, let and currently being constructed. Four miles were added to the south limits of the original project, which resulted in additional cost.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2013

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 5.2	\$ 7.1
Other Construction Elements:	\$ 0.7	\$ 0.0
Engineering:	\$ 1.2	\$ 0.9
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 7.1</b>	<b>\$ 8.0</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

Project is substantially complete.

### Project Risks

Risks retired.

### Schedule

Environmental Approval Date: 02/24/2014  
Municipal Consent Approval Date: Not Needed  
Geometric Layout Approval Date: 3/21/2013  
Construction Limits Established Date: 03/21/2013  
Original Letting Date: 02/19/2016  
Current Letting Date: 04/25/2014  
Construction Season: 2014  
Estimated Substantial Completion: August 2014



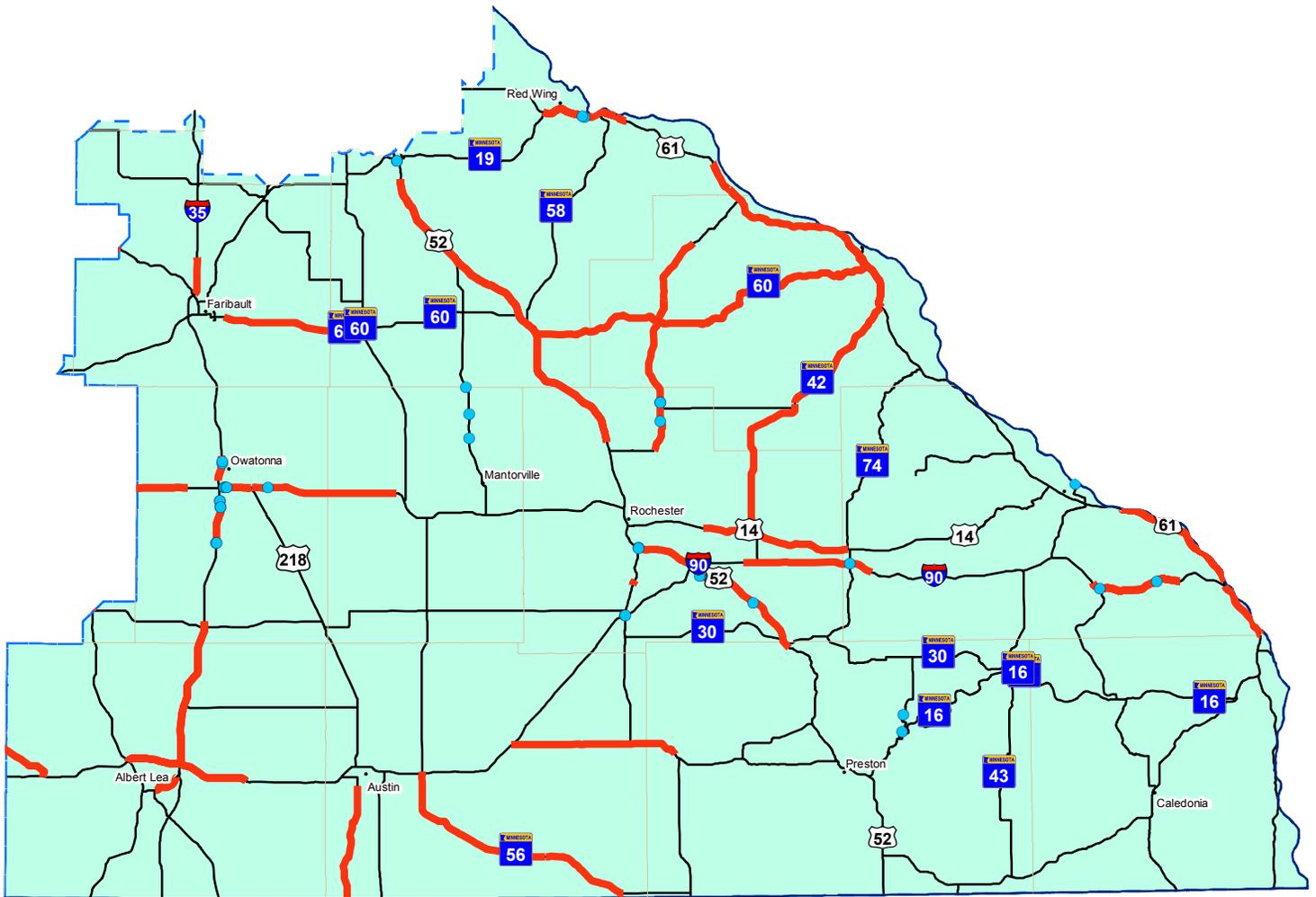
Minnesota Department of Transportation  
District 4  
1000 Hwy 10 W  
(218) 846-3600

**District Engineer:** Jody Martinson  
**Project Manager:** Thomas Pace

**Revised Date:** 12/15/2016

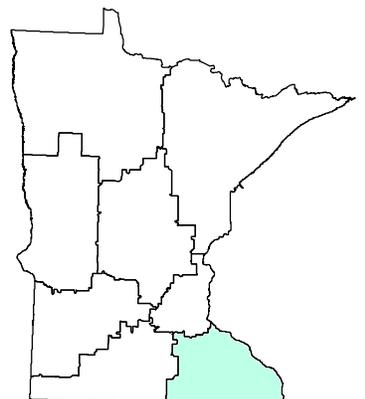
# Major Highway Projects 2017

## D6-ROCHESTER



### Major Highway Projects

- Bridge Projects
- Roadway Projects
- State Boundary
- County Line
- - - Construction District



## District Project Summary

### District 6

Route	State Project #	Project Location	Page
Hwy 63	5510-84	Hwy 63. CSAH 33 to 0.3 mi W of Hwy 60	E 2
Hwy 105	5007-34	Hwy 105 from IA State Line to Bridge 5971	E 3
Hwy 57	2007-41	Hwy 57	E 4
Hwy 42	7901-52	Hwy 42 from 0.35 mi N of Hwy 247 to Hwy 61	E 5
Hwy 56	5005-64	Hwy 56 from Leroy E. City Line to Maple St. (Taopi)	E 6
Hwy 63	5509-84	Hwy 63, Over I 90	E 7
Hwy 61	7906-97	Hwy 61, in Lake City from West Elm Street to Central Point Road	E 8
Hwy 65	2405-32	Hwy 65 NB and SB from Newton Ave to I-35 Ramps in Albert Lea, MN	E 9
I-35	6680-113	I 35 SB Lanes from 0.1 mi N Hwy 21 to 0.1 mi N CSAH 9	E 10
Hwy 52	5507-64	Hwy 52 from I-90 (Marion) to Chatfield	E 11
Hwy 14	2001-36	Hwy 14 from I-35 to Dodge Center	E 12
Hwy 14	5503-45	Hwy 14 from Chester to St Charles	E 13
Hwy 16	5003-17	Hwy 16 from I-90 to Tracy Road Spring Valley	E 14
Hwy 42	5506-22	Hwy 14 to north of Hwy 247	E 15
Hwy 43	8503-46	Winona Bridge over Mississippi River	E 16
Hwy 52	2506-77	Hwy 52 from Hwy 7 to 2 miles south of Hwy 19	E 17
Hwy 52	2506-79	Hwy 52 bridges over Little Cannon River	E 18
Hwy 52	5507-63	Hwy 52 over Hwy 63	E 19
Hwy 52	2506-75	Rochester to Cannon Falls	E 20
Hwy 52	5507-69	Hwy 63 to just south of I-90	E 21
Hwy 56	5005-62	Hwy 56 from Maple St. in Taopi to Hwy 46 in Mower County	E 22
Hwy 60	7902-25	Hwy 60 from Hwy 52 to 63	E 23
Hwy 60	6607-49	Faribault to Kenyon	E 24
Hwy 60	7903-54	Hwy 63 in Zumbro Falls to Hwy 61 in Wabasha	E 25
Hwy 61	2514-120	Ready Mix entrance in Red Wing to Hwy 19	E 26
Hwy 61	2514-122	Hwy 61 from Potter St. to Old West Main Stet	E 27
Hwy 61	2514-121	Hwy 61 in Red Wing	E 28
Hwy 61	7906-96	Hwy 42 to just north of Lake City limits	E 29
Hwy 61	8504-79	I-90 to Hwy 15 in Homer	E 30
Hwy 63	2515-21	Hwy 63 bridge over the Mississippi river and Hwy 61	E 31
Hwy 63	5509-80	County Road 16 interchange	E 32
Hwy 63 and Hwy 60	7908-35	Hwy 63 from Hwy 60 to CR 78 and Hwy 60 in Zumbro Falls	E 33
Hwy 250	2319-16	Bridges on Hwy 250 in Lanesboro	E 34
I-35	2480-104	Freeborn/Steele	E 35
I-35	7480-124	Straight River Rest Area NB	E 36
I-35	7480-126	6 bridges on I-35 and 4 bridges on Hwy 14	E 37
I-90	8580-163	West of Hwy 76 to west of County Road 12	E 38
I-90	8580-165	Winona	E 39
I-90	5580-90	East of County Road 19 to East of Hwy 74	E 40
I-90	2482-74	I-90 WB Lanes from Hwy13 to Hwy 46 (Petran)	E 41
I-90	8580-149	Mississippi River Bridges - Dresbach	E 42
I-90	8580-167	Both westbound and eastbound lanes of I-90 in Winona County	E 43

Hwy 14	7402-30	Hwy 14 from Hwy 218 to CR 180 in Steele County	E 44
I-35	7480-113	5 miles south of Owatonna to Faribault	E 45

## PROJECT SUMMARY

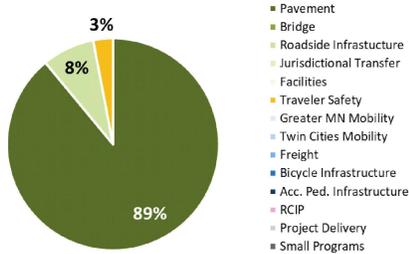
Hwy 63  
 Hwy 63. CSAH 33 to 0.3 mi W of Hwy 60  
 Bridge 8313, &, 8831  
 State Project No. 5510-84  
 NA



### Primary Purpose

Performance-based: Pavement Condition

### Investment Category



### Project Description

Hwy 63. CSAH 33 to 0.3 mi W of Hwy 60, whitetopping and replace bridges 8831 and 8813 over stream

### Recent Changes and Updates

Project limits previously were from 75th Street in Olmsted County to Wabasha County Road 78 and programmed as a bituminous mill & overlay. In 2016, the limit was changed to begin at 75th Street and end at Hwy 60 in Zumbro Falls and replace two box culvert bridges.

### Project History

This section of Hwy 63 is a two-lane rural highway. The ride quality index is low and starting to show signs of deterioration, which will be addressed to extend pavement life.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2016

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 6.9	\$ 10.4
Other Construction Elements:	\$ 0.6	\$ 0.5
Engineering:	\$ 1.4	\$ 2.1
Right of Way:	\$ 0.1	\$ 0.7
<b>Total:</b>	<b>\$ 9.0</b>	<b>\$ 13.1</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

Standard practices were used to develop the base-line cost estimate for this project. Right of way is an assumption based on parcels being affected and average MDA costs. This cost will be updated when acres affected are evaluated for current land prices.

### Project Risks

If the final project cost estimate comes in high then the project could be pushed out into a future letting date if funds are not available to cover the estimate.

A PIF maybe required to meet current letting.

### Schedule

Environmental Approval Date: 7/06/2017  
 Municipal Consent Approval Date: Not Needed  
 Geometric Layout Approval Date: Not needed  
 Construction Limits Established Date: 09/01/2016  
 Original Letting Date: 1/26/2018  
 Current Letting Date: 2/23/2018  
 Construction Season: 2018  
 Estimated Substantial Completion: 11/2018



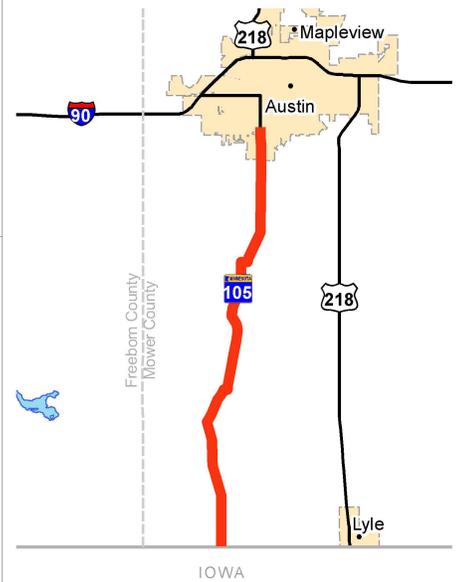
Minnesota Department of Transportation  
 District 6  
 2900 48th Street NW  
 (507) 286-7500

District Engineer: Jeff Vlaminck  
 Project Manager: Heather Lukes

Revised Date: 12/15/2017

## PROJECT SUMMARY

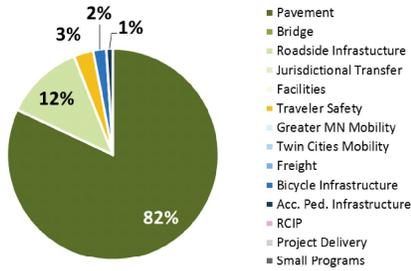
Hwy 105  
 Hwy 105 from IA State Line to Bridge 5971  
 Bridge NA  
 State Project No. 5007-34  
 NA



### Primary Purpose

Performance Based Need: Pavement Condition

### Investment Category



### Project Description

Hwy 105 From IA State Line to Bridge 5971, Bituminous mill and overlay including upgrading pedestrian facilities for ADA compliancy.

### Recent Changes and Updates

The purpose of this project is to extend pavement service life and provide a safer roadway.

### Project History

This project was advanced in the STIP during spring 2017 as a FY21 ELLA scoping to be completed in FY2018.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 05/2017

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 4.3	\$ 4.3
Other Construction Elements:	\$ 0.3	\$ 0.3
Engineering:	\$ 0.8	\$ 0.8
Right of Way:	\$ TBD	\$ TBD
<b>Total:</b>	<b>\$ 4.3</b>	<b>\$ 4.3</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

The Baseline Estimate is a pre-scoping level cost estimate only. A new baseline estimate will established with scoping.

### Project Risks

Risks will be identified during scoping.

### Schedule

Environmental Approval Date: TBD  
 Municipal Consent Approval Date: Not Needed  
 Geometric Layout Approval Date: TBD  
 Construction Limits Established Date: TBD  
 Original Letting Date: 12/18/2019  
 Current Letting Date: 12/18/2019  
 Construction Season: 2020  
 Estimated Substantial Completion: 10/2020

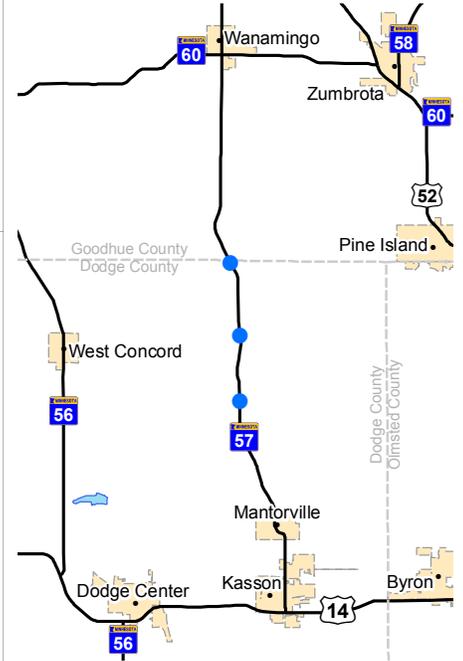


Minnesota Department of Transportation  
 District 6  
 2900 48th Street NW  
 (507) 286-7500

District Engineer: Jeff Vlamincik  
 Project Manager: Richard Augustin  
 Revised Date: 12/15/2017

## PROJECT SUMMARY

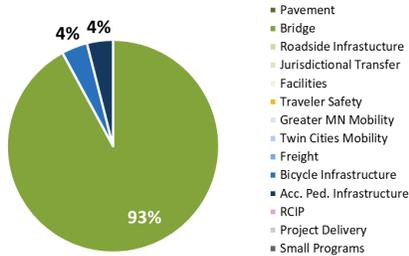
Hwy 57  
Hwy 57  
Bridge 6861, 6862, 6867  
State Project No. 2007-41  
NA



### Primary Purpose

Performance Based need : Bridge Condition

### Investment Category



### Project Description

Hwy 57, Over N Br Mid Fk Zumbro River  
Replace Bridge 6862 with New Bridge  
20015, Over Milliken Creek Replace Bridge  
6861 and Over Mid Fork Zumbro River  
Replace Bridge 6867

### Recent Changes and Updates

No changes.

### Project History

Bridge 6861 over Milliken Creek was constructed in 1955, and is in need of replacement.

The existing bridge has a sufficiency rating of 86.5, deck NBI rating of 6, superstructure NBI rating of 6, substructure NBI rating of 7, and deck geometry NBI rating of 5. The bridge railing is considered substandard.

There are many signs of physical deterioration of the bridge structure outlined in the bridge inspection report, and replacement of the bridge is recommended.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2015

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 5.9	
Other Construction Elements:	\$ 0.0	
Engineering:	\$ 1.0	
Right of Way:	\$ 0.0	
<b>Total:</b>	<b>\$ 6.9</b>	

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

#### Project Risks

No significant risks are anticipated.

### Schedule

Environmental Approval Date: Pending Approval  
Municipal Consent Approval Date: Not Needed  
Geometric Layout Approval Date: Pending Approval  
Construction Limits Established Date: Pending Approval  
Original Letting Date: 1/27/2017  
Current Letting Date: 12/21/2018  
Construction Season: May - Nov. 2019  
Estimated Substantial Completion: Nov. 2019



Minnesota Department of Transportation  
District 6  
2900 48th Street NW  
(507) 286-7500

**District Engineer:** Jeff Vlamincik  
**Project Manager:** Jai Kalsy

**Revised Date:** 12/15/2017

## PROJECT SUMMARY

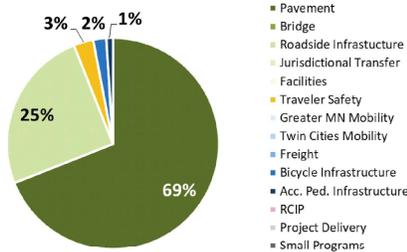
Hwy 42  
 Hwy 42 from 0.35 mi N of Hwy 247 to Hwy 61  
 Bridge NA  
 State Project No. 7901-52  
 NA



### Primary Purpose

Performance-based Need: Pavement & Roadside Infrastructure Condition

### Investment Category



### Project Description

Hwy 42 from 0.35 mi N of Hwy 247 to Hwy 61, bituminous mill and overlay

### Recent Changes and Updates

Performance-based Need: Pavement & Roadside Infrastructure Condition

### Project History

Project was originally a FY21 project.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2017

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 5.7	\$ 5.7
Other Construction Elements:	\$ 0.7	\$ 0.7
Engineering:	\$ 1.1	\$ 1.1
Right of Way:	\$ 0.3	\$ 0.3
<b>Total:</b>	<b>\$ 7.5</b>	<b>\$ 7.5</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

Baseline estimate is from 2016 scoping report.

### Project Risks

Competitive bid may be higher or lower than expected.

### Schedule

Environmental Approval Date: TBD  
 Municipal Consent Approval Date: TBD  
 Geometric Layout Approval Date: TBD  
 Construction Limits Established Date: TBD  
 Original Letting Date: 1/1/2021  
 Current Letting Date: 10/25/2019  
 Construction Season: 2020  
 Estimated Substantial Completion: 11/2020



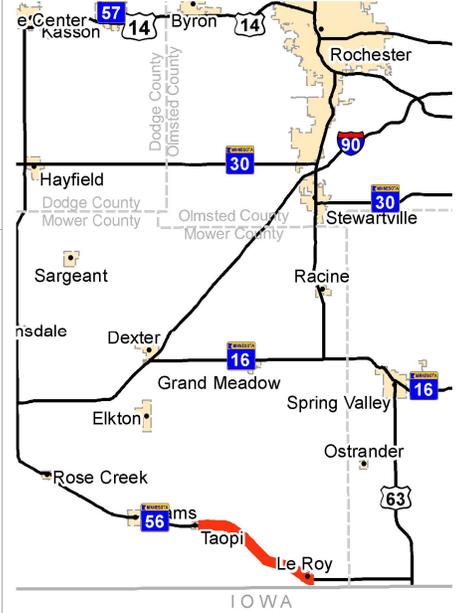
Minnesota Department of Transportation  
 District 6  
 2900 48th Street NW  
 (507) 286-7500

District Engineer: Jeff Vlaminck  
 Project Manager: Paul Zager

Revised Date: 12/15/2017

# PROJECT SUMMARY

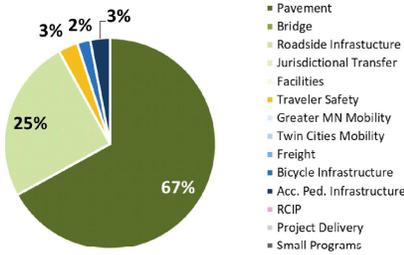
Hwy 56  
 Hwy 56 from Leroy E. City Line to Maple St. (Taopi)  
 Bridge NA  
 State Project No. 5005-64  
 NA



## Primary Purpose

Performance Based Need: Pavement Condition

## Investment Category



## Project Description

Hwy 56 from Leroy E. City Line to Maple St. (Taopi), bituminous mill and overlay. Other work will include ADA improvements in the City of Leroy.

## Recent Changes and Updates

No changes.

## Project History

This 2-Lane segment of TH 56 is showing signs of deterioration. The purpose of this project is to preserve the existing roadway structure, extend pavement life, and improve ride quality. Additionally, ADA facility upgrades in the City of Leroy will be included with this project.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2017

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 4.2	
Other Construction Elements:	\$ 0.4	
Engineering:	\$ 0.8	
Right of Way:	\$ 0.0	
<b>Total:</b>	<b>\$ 5.4</b>	

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

## Key Cost Estimate Assumptions

Project costs are from the project scoping report dated April 10, 2017.

## Project Risks

Storm sewer improvements could expose contaminated soils. Environmental exploration will need to be completed to determine this.

## Schedule

Environmental Approval Date: Pending  
 Municipal Consent Approval Date: Not Needed  
 Geometric Layout Approval Date: Not Needed  
 Construction Limits Established Date: Pending  
 Original Letting Date: 1/23/2020  
 Current Letting Date: 10/25/2019  
 Construction Season: 2020  
 Estimated Substantial Completion: 10/2020



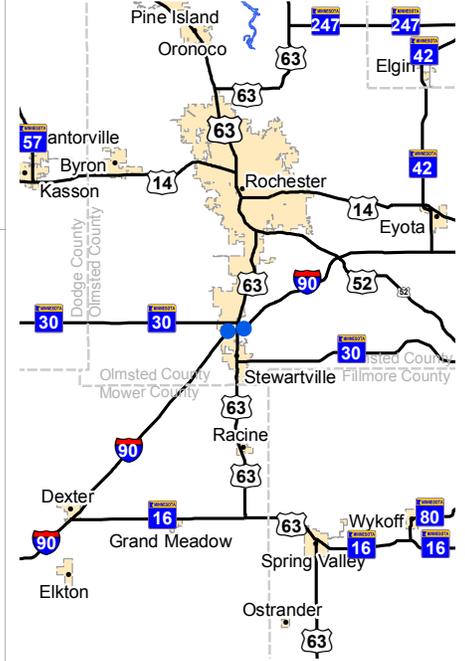
Minnesota Department of Transportation  
 District 6  
 2900 48th Street NW  
 507) 286-7500

District Engineer: Jeff Vlaminck  
 Project Manager: Kyle Lake

Revised Date: 12/15/2017

## PROJECT SUMMARY

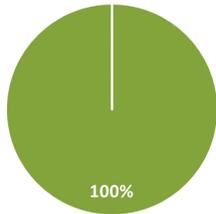
Hwy 63  
 Hwy 63, Over I 90  
 Bridge 9890, &, 9889  
 State Project No. 5509-84  
 NA



### Primary Purpose

Performance-based Need: Pavement & Roadside Infrastructure & Bridge Condition

### Investment Category



- Pavement
- Bridge
- Roadside Infrastructure
- Jurisdictional Transfer
- Facilities
- Traveler Safety
- Greater MN Mobility
- Twin Cities Mobility
- Freight
- Bicycle Infrastructure
- Acc. Ped. Infrastructure
- RCIP
- Project Delivery
- Small Programs

### Project Description

Hwy 63, over I 90, Replace NB Bridge 9890 and SB Br 9889

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2017

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 14.9	\$ 14.9
Other Construction Elements:	\$ 1.1	\$ 1.1
Engineering:	\$ 2.6	\$ 2.6
Right of Way:	\$ TBD	\$ TBD
<b>Total:</b>	<b>\$ 17.9</b>	<b>\$ 17.9</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Recent Changes and Updates

This project had been in FY25 and was advanced to FY20. It is currently being scoped and all phases of design activities will be completed by a consultant.

### Project History

No project history.

### Key Cost Estimate Assumptions

The Baseline Estimate is a pre-scoping level cost estimate only. The project will be re-scoped in 2017 and a new baseline estimate established.

### Project Risks

Competitive bid may be higher or lower than expected.

### Schedule

Environmental Approval Date: TBD  
 Municipal Consent Approval Date: TBD  
 Geometric Layout Approval Date: TBD  
 Construction Limits Established Date: TBD  
 Original Letting Date: 1/25/19  
 Current Letting Date: 1/24/2020  
 Construction Season: 2020  
 Estimated Substantial Completion: 10/2021



Minnesota Department of Transportation  
 District 6  
 2900 48th Street NW  
 507) 286-7500

**District Engineer:** Jeff Vlamincik  
**Project Manager:** Heather Lukes

**Revised Date:** 12/15/2017

# PROJECT SUMMARY

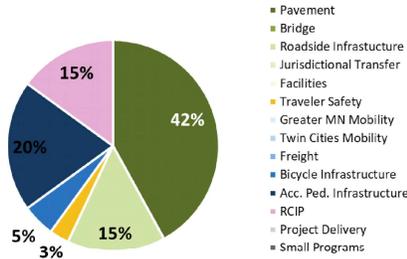
Hwy 61  
 Hwy 61, in Lake City from West Elm Street to Central Point Road  
 Bridge NA  
 State Project No. 7906-97  
 NA



## Primary Purpose

Performance Based Needs: Pavement Condition & Safety

## Investment Category



## Project Description

Reconstruction of TH 61 in Lake City from W. Elm St. to Central Point Road, a 4 to 3 lane conversion. Pedestrian facilities will be improved to current ADA standards. A continuous sidewalk will be constructed on the west side and a multiuse trail on the east side of TH 61 along the lake from Jewel/Park Avenue to Central Point Road.

The traffic signals at TH 61/63 and TH 61/Marion Street will be replaced. Two or three rectangular rapid flashing beacons will be installed to improve pedestrian crossing safety.

## Recent Changes and Updates

An agreement was reached with the city that will have the city leading the design and project development process. MnDOT will let award and administer the contract.

## Project History

This section was originally planned to be part of the mill & overlay project from TH 42 to 1 mile north of Lake City. The city decided in the winter of 2016-2017 to convert this 4 lane undivided section to a 3 lane section, with one through lane in each direction and a continuous two-way left turn lane. It was decided to do a complete reconstruction to address all needs, including mobility, pavement condition, and traffic/pedestrian/bicycle safety.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2017

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 8.7	\$ 9.9
Other Construction Elements:	\$ 0.5	\$ 0.5
Engineering:	\$ 0.7	\$ 0.7
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 9.9</b>	<b>\$ 9.9</b>

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

## Key Cost Estimate Assumptions

The cost estimate includes this agency's portion only. It is based on a conceptual pavement section. Drilling and further analysis is needed to determine the final pavement section. It has been determined that TH 61 will be bituminous, however the final pavement section could affect the cost estimate if it is substantially different than what was originally assumed. It is assumed that the city will acquire all necessary right-of-way, however the amount needed should be minor and only on account of pedestrian facility improvements.

## Project Risks

A significant amount of controversy within the city developed when deciding whether or not to leave TH 61 as a 4 lane or to convert it to a 3 lane. Public communication will be essential throughout project development. There is a risk for impacting contamination during excavation. Environmental investigations will be needed early on. The city originally wanted to include construction of peninsulas into the Mississippi River to help with water quality along this section. However, due to environmental concerns from the DNR and Corps of Engineers it was determined to remove the work from this project. The city is still pursuing this work separately.

## Schedule

Environmental Approval Date: TBD  
 Municipal Consent Approval Date: TBD  
 Geometric Layout Approval Date: TBD  
 Construction Limits Established Date: TBD  
 Original Letting Date: 11/22/2019  
 Current Letting Date: 11/22/2019  
 Construction Season: 2020  
 Estimated Substantial Completion: November 2020



Minnesota Department of Transportation  
 District 6  
 2900 48th Street NW  
 507) 286-7500

District Engineer: Jeff Vlaminck  
 Project Manager: Chad Hanson

Revised Date: 12/15/2017

# PROJECT SUMMARY

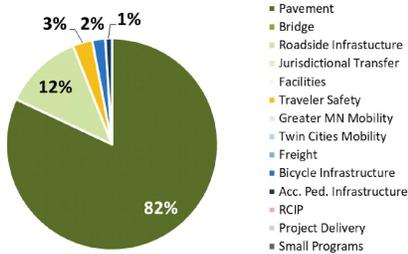
Hwy 65  
 Hwy 65 NB and SB from Newton Ave to I-35 Ramps in Albert Lea, MN  
 Bridge NA  
 State Project No. 2405-32  
 NA



## Primary Purpose

Performance-based Need: Pavement

## Investment Category



## Project Description

Hwy 65 NB and SB from Newton Ave to I-35 Ramps in Albert Lea, MN, will include a bituminous mill and overlay, upgrading ramps and sidewalks to meet ADA standards, storm sewer repairs, and replacing the signal at the intersection of Garfield and TH65.

## Recent Changes and Updates

No changes.

## Project History

TH 65 within the project limits is a 4-lane divided urban and rural, principal arterial highway. Pavement is in poor condition and within the project limits is deteriorating rapidly. Currently as of 2016, the RQI is 2.3, lower from a 2.9 RQI just two years prior. The pavement is in need of a fix due to pavement condition and age. Additionally many of the pedestrian ramps and sidewalks have ratings of 3 or higher due to poor cross-slopes, horizontal and vertical discrepancies, non-compliant landings or poor pavement. This makes it more difficult for non-motorized users to travel pedestrian facilities along TH65. Also the 39-year old signal at Garfield Avenue and TH65 has become increasingly costly to repair as it has reached beyond the average signal life of 25 years of service.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2017

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 4.1	\$ 4.1
Other Construction Elements:	\$ 0.3	\$ 0.3
Engineering:	\$ 0.7	\$ 0.7
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 5.1</b>	<b>\$ 5.1</b>

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

## Key Cost Estimate Assumptions

Baseline estimate based on scoping report finalized in 2017.

## Project Risks

Competitive bid may be higher or lower than expected.

## Schedule

Environmental Approval Date: TBD  
 Municipal Consent Approval Date: TBD  
 Geometric Layout Approval Date: TBD  
 Construction Limits Established Date: TBD  
 Original Letting Date: 11/20/2020  
 Current Letting Date: 11/20/2020  
 Construction Season: 2021  
 Estimated Substantial Completion: 11/2021



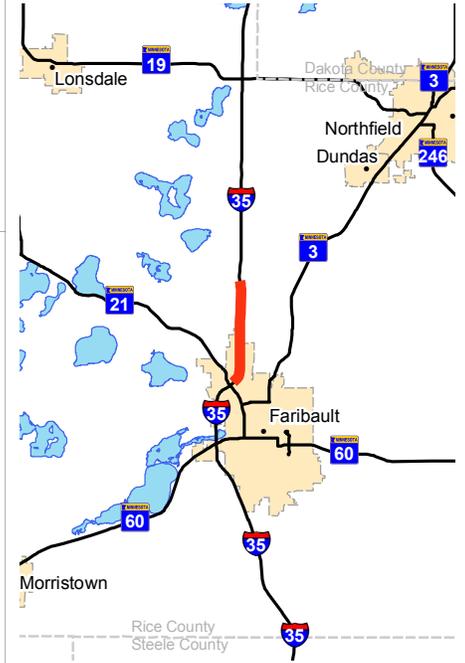
Minnesota Department of Transportation  
 District 6  
 2900 48th Street NW  
 507) 286-7500

District Engineer: Jeff Vlamincik  
 Project Manager: Heather Lukes

Revised Date: 12/15/2017

# PROJECT SUMMARY

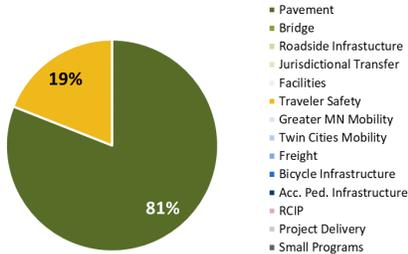
I-35  
 I 35 SB Lanes from 0.1 mi N Hwy 21 to 0.1 mi N CSAH 9  
 Bridge 66817  
 State Project No. 6680-113  
 pending



## Primary Purpose

Improve ride quality and service life on SB I-35 and improve safety of TH 21 Exit movement.

## Investment Category



## Project Description

\*\*CHAP 3\*\* I 35 SB Lanes from 0.1 mi S Hwy 21 to 0.1 mi N CSAH 9, Unbonded concrete overlay plus improve ramp geometrics, culvert improvements on NB and SB side, and signing revisions to both sides of I-35.

## Recent Changes and Updates

Project was advanced 2 years  
 2 projects were merged  
 Project was upscooped to an unbonded overlay  
 TH 21 Exit Loop work added

## Project History

Project is in Faribault, Steele Co and started as a mill & overlay of SB I-35. A second project was merged with it to lengthen the TH 21 Exit deceleration lane. Then the project was advanced 2 years. The project was upscooped to an unbonded overlay. Questions about the exit loop arose so the geometry at the top of the loop was added. The project was extended south. Then the exit loop was extended to a full regrade. Finally with the geometric layout bridge rail revisions are being added.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2015

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 1.8	\$ 8.1
Other Construction Elements:	\$ 0.2	\$ 0.4
Engineering:	\$ 0.4	\$ 1.3
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 2.4</b>	<b>\$ 9.8</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

Estimate based costs on other similarly sized unbonded overlay projects within the District.  
 No ROW acquisition assumed.  
 major utility relocation.  
 Original estimate based on original M&O cost estimate (7-16-15)  
 Current estimate from scoping amendment # 2 (8-23-17)

## Project Risks

Price escalation because project is short and prices could be higher than expected.  
 Detour may result in additional delay on I-35 during construction especially during rush hour, which would encourage drivers to find their own route through the area

## Schedule

Environmental Approval Date: pending  
 Municipal Consent Approval Date: Not Needed  
 Geometric Layout Approval Date: pending  
 Construction Limits Established Date: pending  
 Original Letting Date: 11/16/2018  
 Current Letting Date: 4/27/2018  
 Construction Season: summer of 2018  
 Estimated Substantial Completion: fall of 2018



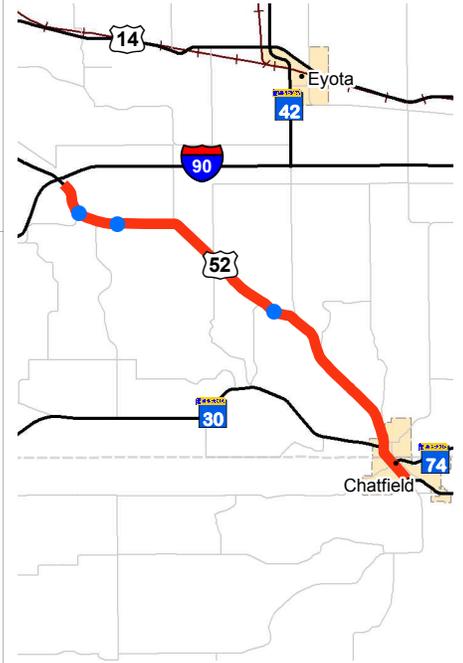
Minnesota Department of Transportation  
 District 6  
 2900 48th Street NW  
 (507) 286-7500

**District Engineer:** Jeff Vlamincik  
**Project Manager:** Paul Zager

**Revised Date:** 12/15/2017

# PROJECT SUMMARY

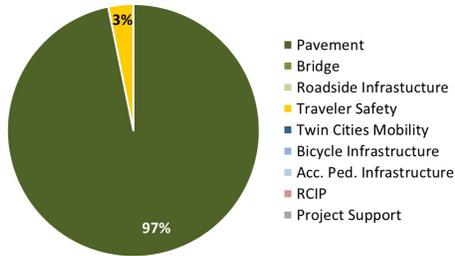
Hwy 52  
 Hwy 52 from I-90 (Marion) to Chatfield  
 Bridge 6124, 8182, and, 8183  
 State Project No. 5507-64  
 NA



## Primary Purpose

Performance-based Need: Pavement

## Investment Category



## Project Description

This is a bituminous mill and overlay with ADA improvements, and the replacement of bridges 6124, 8182, and 8183 on Hwy 52 from I-90 through Chatfield.

Additionally thegnal at TH52 and TH30 will be replaced. A cooperative agreement is planned with Olmsted County to include paving of 200-ft of CR 136 to reduce aggregate washing from the county road into TH52 ditches.

## Recent Changes and Updates

The project changed from a regrade to a mill and overlay based on district priorities and funding issues. The project includes bridge replacements originally part of SP 5507-65. This project is also associated with SP 2311-31.

## Project History

The purpose of this project is to preserve the existing roadway structure, extend pavement life, and improve ride quality.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2016

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 4.8	\$ 8.7
Other Construction Elements:	\$ 0.0	\$ 1.4
Engineering:	\$ 1.0	\$ 1.2
Right of Way:	\$ 0.0	\$ 1.6
<b>Total:</b>	<b>\$ 5.8</b>	<b>\$ 12.9</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

20% engineering estimate used to arrive at total cost estimate. Estimates will be updated when bids are let.

Current estimate reflects the SP cost of SP5507-64,07-65 & 2311-31 being combined.

## Project Risks

Competitive bid may be higher or lower than expected.

## Schedule

Environmental Approval Date: TBD  
 Municipal Consent Approval Date: TBD  
 Geometric Layout Approval Date: 8/29/2017  
 Construction Limits Established Date: 06/07/2015  
 Original Letting Date: 10/26/2018  
 Current Letting Date: 12/21/2018  
 Construction Season: 2019  
 Estimated Substantial Completion: 11/2019



Minnesota Department of Transportation  
 District 6  
 2900 48th Street NW  
 (507) 286-7500

**District Engineer:** Jeff Vlamincik  
**Project Manager:** Heather Lukes

**Revised Date:** 12/15/2016

## PROJECT SUMMARY

Hwy 14  
 Hwy 14 from I-35 to Dodge Center  
 Bridge NA  
 State Project No. 2001-36

**Substantially Complete**



### Primary Purpose

Performance-based Need: Pavement & District Safety Plan

### Investment Category

\*This project was designed and scoped before the current highway investment plan MnSHIP was developed, which breaks projects into investment categories.

### Project Description

This project includes bituminous resurfacing, drainage improvements and traffic safety improvements over 16 miles from I-35 to Dodge Center.

### Recent Changes and Updates

This project was substantially completed in October 2015 and opened up to traffic.

A favorable bid related to material costs led to a lower estimate.

### Project History

The Ride Quality Index for this segment of Hwy 14 and the remaining service life indicate the need for improvement in the short-term.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2011

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 5.9	\$ 4.1
Other Construction Elements:	\$ 0.2	\$ 0.9
Engineering:	\$ 1.2	\$ 0.4
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 7.3</b>	<b>\$ 5.4</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

Standard practices were used to develop the base-line cost estimate for this project. Right of way was not required.

### Project Risks

No detour agreements are anticipated for this project; however, recommended drainage improvements may lead to the need for a detour.

### Schedule

Environmental Approval Date: 5/20/2014  
 Municipal Consent Approval Date: Not Needed  
 Geometric Layout Approval Date: Not Needed  
 Construction Limits Established Date: Unknown  
 Original Letting Date: 11/21/2014  
 Current Letting Date: 01/23/2015  
 Construction Season: 2015  
 Estimated Substantial Completion: 10/2015



Minnesota Department of Transportation  
 District 6  
 2900 48th Street NW  
 (507) 286-7500

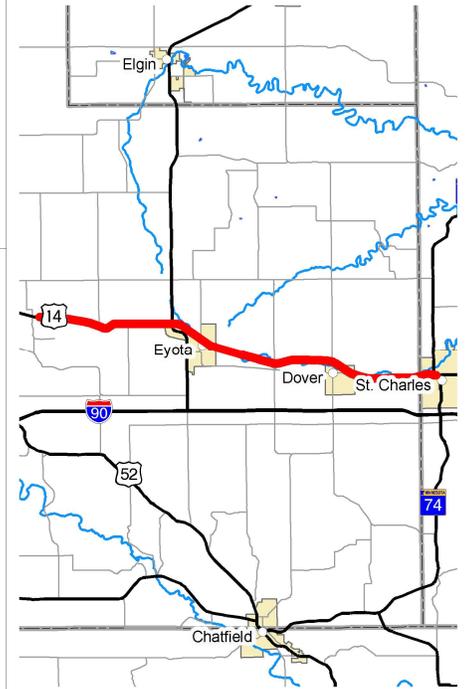
**District Engineer:** Jeff Vlamincik  
**Project Manager:** Heather Lukes

**Revised Date:** 12/15/2016

## PROJECT SUMMARY

Hwy 14  
Hwy 14 from Chester to St Charles  
Bridge NA  
State Project No. 5503-45

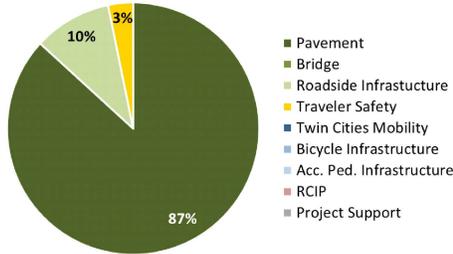
NA  
**Substantially Complete**



### Primary Purpose

Performance Based Need: pavement condition

### Investment Category



### Project Description

This project on Hwy 14 is a grading and mill and overlay from east of Hwy 19 to the west junction of Hwy 74.

### Recent Changes and Updates

Project will be completed in October 2016.

### Project History

This segment of Hwy 14 is a two-lane rural highway. The pavement is starting to show signs of deterioration, which is expected to accelerate in the upcoming years. The project is needed to extend pavement life.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2014

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 6.5	\$ 4.9
Other Construction Elements:	\$ 0.5	\$ 0.1
Engineering:	\$ 0.9	\$ 0.3
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 7.9</b>	<b>\$ 5.3</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

The baseline cost estimate is from the project scoping report of April 18, 2014 and based on a FY18 letting.

The construction letting estimate for current estimate is based on the district's engineers estimate for letting. Winning bid was \$4.9 million for construction at letting.

### Project Risks

No outstanding risks on this project.

### Schedule

Environmental Approval Date: 04/29/2015  
Municipal Consent Approval Date: NA  
Geometric Layout Approval Date: NA  
Construction Limits Established Date: NA  
Original Letting Date: 11/17/2017  
Current Letting Date: 12/18/2015  
Construction Season: 2016  
Estimated Substantial Completion: 10/2016



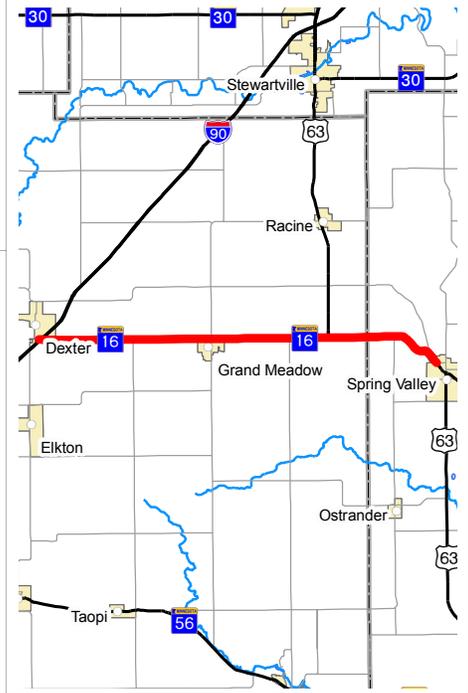
Minnesota Department of Transportation  
District 6  
2900 48th Street NW  
(507) 286-7500

District Engineer: Jeff Vlamnick  
Project Manager: Heather Lukes

Revised Date: 12/15/2016

# PROJECT SUMMARY

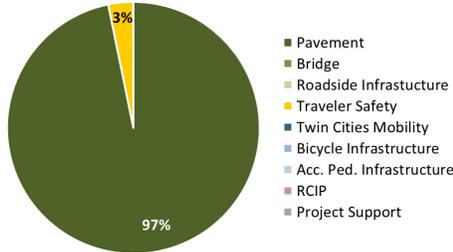
Hwy 16  
 Hwy 16 from I-90 to Tracy Road Spring Valley  
 Bridge NA  
 State Project No. 5003-17  
 NA



## Primary Purpose

Performance Based Need: Pavement Condition

## Investment Category



## Project Description

This project is a 16-mile mill and overlay from I-90 to Spring Valley.

It will include replacing Bridge Nos. 6045, 6046, & 6047.

## Recent Changes and Updates

This project had three box culvert bridges added to the scope. The scope baseline estimate was also updated to reflect lower bituminous unit prices than assumed when originally scoped. Therefore there was only a moderate increase in the current estimate from the baseline estimate.

## Project History

This segment of Hwy 16 is a rural 2-lane roadway. The pavement is beginning to deteriorate, which is expected to accelerate over the upcoming years. The project is needed to extend service life and improve ride quality. It includes safety and other improvements.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2015

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 7.0	\$ 7.7
Other Construction Elements:	\$ 0.6	\$ 0.6
Engineering:	\$ 0.9	\$ 1.5
Right of Way:	\$ 0.0	\$ 0.5
<b>Total:</b>	<b>\$ 8.5</b>	<b>\$ 9.9</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

The cost estimates are from the project scoping report of July 15, 2016 and adjusted based on inflation and addition of the bridges added to the project. R/W is an assumption based parcels being affected and average MDA costs. This cost will be updated when acres affected are evaluated for current land prices.

## Project Risks

Competitive bids may be higher or lower than expected. Additional box culverts may require a PIF to keep the project on schedule for letting.

## Schedule

Environmental Approval Date: TBD  
 Municipal Consent Approval Date: NA  
 Geometric Layout Approval Date: TBD  
 Construction Limits Established Date: TBD  
 Original Letting Date: 01/25/2019  
 Current Letting Date: 01/25/2019  
 Construction Season: 2019  
 Estimated Substantial Completion: 11/2019



Minnesota Department of Transportation  
 District 6  
 2900 48th Street NW  
 (507) 286-7500

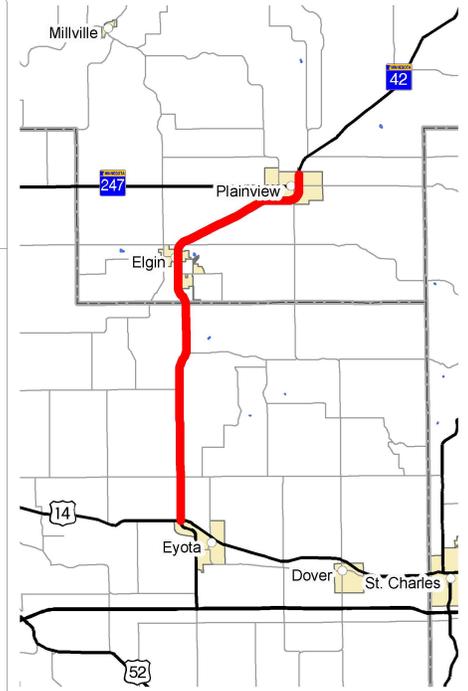
**District Engineer:** Jeff Vlamnick  
**Project Manager:** Heather Lukes

**Revised Date:** 12/15/2016

## PROJECT SUMMARY

Hwy 42  
 Hwy 14 to north of Hwy 247  
 Bridge NA  
 State Project No. 5506-22

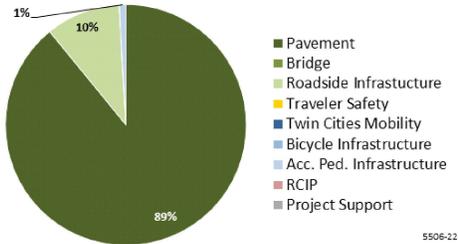
**Substantially Complete**



### Primary Purpose

Performance-based Need: Pavement

### Investment Category



### Project Description

This project is a bituminous resurfacing of 15 miles from Hwy 14 to Hwy 247 from outside Eyota, through Elgin and Plainview.

### Recent Changes and Updates

This project was completed in October 2015 and opened to traffic.

### Project History

The purpose of the project is to preserve the existing roadway structure, improve pavement life and improve ride quality.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2014

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 5.8	\$ 5.8
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 1.2	\$ 1.2
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 7.0</b>	<b>\$ 7.0</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

The current estimate reflects the bid amount.

### Project Risks

There are no remaining risks.

### Schedule

Environmental Approval Date: 12/08/2014  
 Municipal Consent Approval Date: Not Needed  
 Geometric Layout Approval Date: Not Needed  
 Construction Limits Established Date: 2/15/2015  
 Original Letting Date: 11/18/2016  
 Current Letting Date: 04/24/2015  
 Construction Season: 2015  
 Estimated Substantial Completion: 10/2015



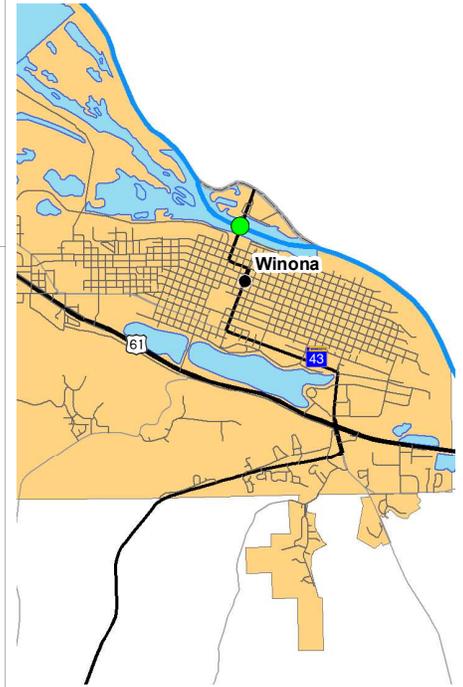
Minnesota Department of Transportation  
 District 6  
 2900 48th Street NW  
 (507) 286-7500

District Engineer: Jeff Vlaminck  
 Project Manager: Kyle Lake

Revised Date: 12/15/2016

# PROJECT SUMMARY

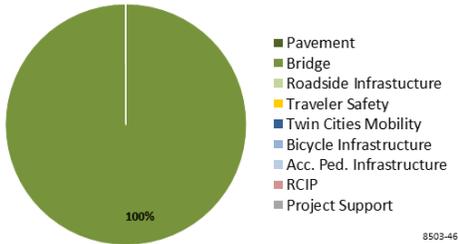
Hwy 43  
 Winona Bridge over Mississippi River  
 Bridge 5900  
 State Project No. 8503-46  
<http://www.dot.state.mn.us/d6/projects/winobridge/>



## Primary Purpose

Performance-based Need: Bridge Condition

## Investment Category



## Project Description

Construct a new bridge and rehabilitate the existing bridge, along with associated roadway work.

## Recent Changes and Updates

Since moving forward using the Construction Manager / General Contractor (CMGC) approach, the risks and contingencies are more fully understood.

Recent cost projections indicate the need for about \$30 million in additional project funding to complete the project because the original project scope was for a new four-lane bridge, yet now there is a new bridge and a rehab; the old bridge has deteriorated more than expected recently; and, the current design will provide a structural design that meets current traffic requirements with no load postings.

## Project History

The Winona Bridge was built in 1941, and recent inspections indicate the need for rehabilitation/replacement. Bridge inspections revealed corrosion issues. The existing bridge was closed to all traffic for one week in 2008 for emergency repairs. It is also considered eligible for the National Register of Historic Places. Because of this, MnDOT recommended rehabilitation of the existing bridge, along with building a new bridge parallel to the old bridge.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2010

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 140.0	\$ 145.0
Other Construction Elements:	\$ 0.0	\$ 2.0
Engineering:	\$ 25.2	\$ 35.0
Right of Way:	\$ 16.2	\$ 16.0
<b>Total:</b>	<b>\$ 181.4</b>	<b>\$ 198.0</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

The environmental impacts with bridge and roadway approach work will not be significant. Contamination issues will not be cost prohibitive. The project has a maximum price cap of \$142 million from Chapter 152 funding for engineering and construction with an additional \$20 million for right of way acquisition. Recent cost projections indicate the need for about \$30 million in additional project funding to complete the project because the original project scope was for a new four-lane bridge, yet now there is a new bridge and a rehab; the old bridge has deteriorated more than expected recently; and the current design will provide a structural design that meets current traffic requirements with no load postings.

## Project Risks

The close proximity of this bridge to the Winona downtown business district of presents unique challenges. The current bridge is eligible for placement on the National Register of Historic Places. Numerous environmental permits are required. This project is the first CMGC project for the department.

## Schedule

Environmental Approval Date: January 2014  
 Municipal Consent Approval Date: 08/19/2013  
 Geometric Layout Approval Date: 07/01/2013  
 Construction Limits Established Date: Unknown  
 Original Letting Date: 01/24/2014  
 Current Letting Date: 07/01/2014  
 Construction Season: 2014 to 2019  
 Estimated Substantial Completion: 12/01/2019



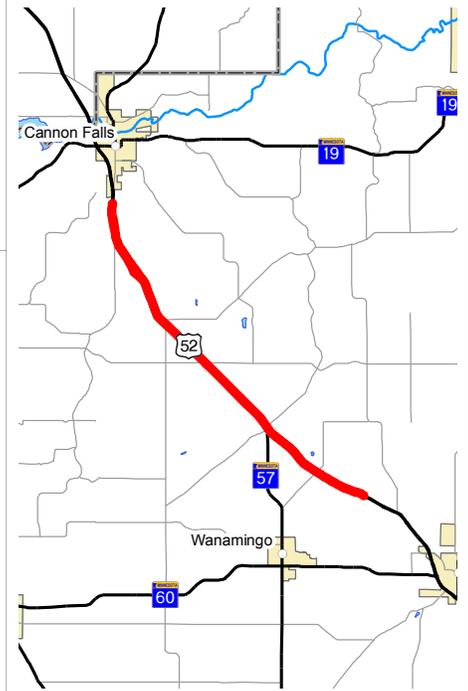
Minnesota Department of Transportation  
 District 6  
 2900 48th Street NW  
 (507) 286-7500

**District Engineer:** Jeff Vlamincik  
**Project Manager:** Terry Ward

**Revised Date:** 12/15/2016

## PROJECT SUMMARY

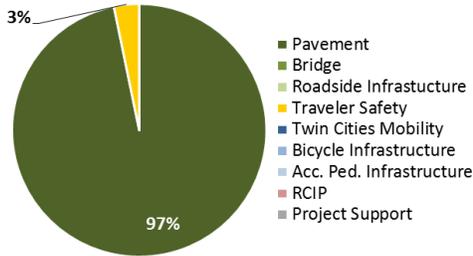
Hwy 52  
Hwy 52 from Hwy 7 to 2 miles south of Hwy 19  
Bridge NA  
State Project No. 2506-77  
NA



### Primary Purpose

Performance Based: Pavement Condition

### Investment Category



### Project Description

This is a bituminous overlay project in Goodhue County on the southbound lanes of Hwy 52.

### Recent Changes and Updates

This project may be changed to a complete reconstruction, with multiple RCUT intersections, access management, and a potential interchange at the TH 57/CSAH 8 intersection. A decision on the final scope will be made in fall 2017. If this happens, which is likely, the letting date will change to sometime in 2020 or 2021.

The letting date for this mill & overlay was changed from October to December 2017 to allow time for this scope decision to be made.

### Project History

The purpose of this project is to preserve existing roadway structure, extend pavement life and improve ride quality. This is a high priority interregional corridor on the National Highway System.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2015

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 5.7	\$ 5.8
Other Construction Elements:	\$ 0.4	\$ 0.4
Engineering:	\$ 0.8	\$ 0.8
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 6.9</b>	<b>\$ 7.0</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

Bituminous prices for other similar type mill & overlay project have been very competitive. The cost estimate was reduced on account of this.

Final hydraulics recommendations were made in 2016, which fits within the existing budget.

### Project Risks

This project could have a last-minute scope change prior to letting. If this happens, which is likely, the letting date will change to sometime in 2020 or 2021.

### Schedule

Environmental Approval Date: 04/2017  
Municipal Consent Approval Date: Not needed  
Geometric Layout Approval Date: Not needed  
Construction Limits Established Date: 04/2017  
Original Letting Date: 10/27/2017  
Current Letting Date: 12/15/2017  
Construction Season: 2018  
Estimated Substantial Completion: 11/2018



Minnesota Department of Transportation  
District 6  
2900 48th Street NW  
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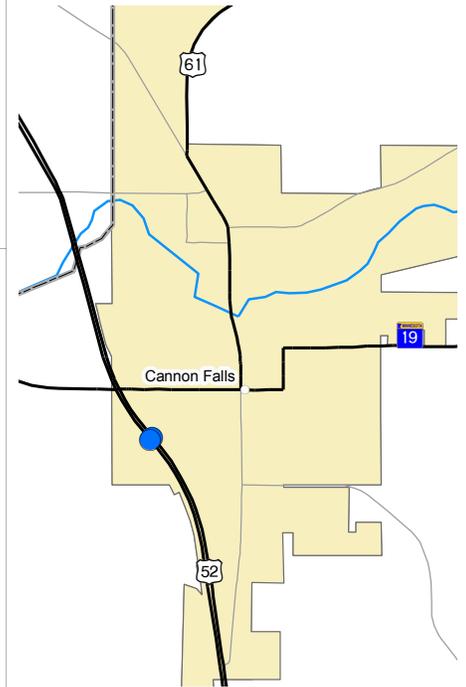
**District Engineer:** Jeff Vlamincik  
**Project Manager:** Chad Hanson

**Revised Date:** 12/15/2016

## PROJECT SUMMARY

Hwy 52  
 Hwy 52 bridges over Little Cannon River  
 Bridge 9485, &, 9486  
 State Project No. 2506-79

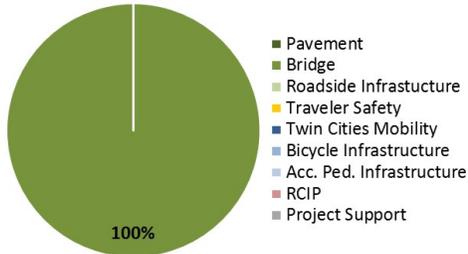
NA  
**Substantially Complete**



### Primary Purpose

Performance-based Need: Bridge Condition

### Investment Category



### Project Description

The project replaces two bridges, 9485 & 9486, over the Little Cannon River on Hwy 52.

### Recent Changes and Updates

This project entered the STIP in 2014. An environmental document is needed, but is not completed yet.

### Project History

The bridge abutments have cracking, substandard bridge railings, and the overall deterioration is increasing.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2015

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 5.2	\$ 3.6
Other Construction Elements:	\$ 0.2	\$ 0.2
Engineering:	\$ 1.0	\$ 0.8
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 6.4</b>	<b>\$ 4.6</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

The Current estimate is lower than the baseline because there was no right of way cost, larger beams were used in the design allowing for single span bridges and fewer beams, and raising roadway profiles was kept to a minimum so there were fewer grading and pavement replacements.

### Project Risks

No significant risks are anticipated.

### Schedule

Environmental Approval Date: 12/15/2017  
 Municipal Consent Approval Date: Not Needed  
 Geometric Layout Approval Date: 02/08/2016  
 Construction Limits Established Date: 02/08/2016  
 Original Letting Date: 02/01/2018  
 Current Letting Date: 2/24/2017  
 Construction Season: 2017  
 Estimated Substantial Completion: November 2017

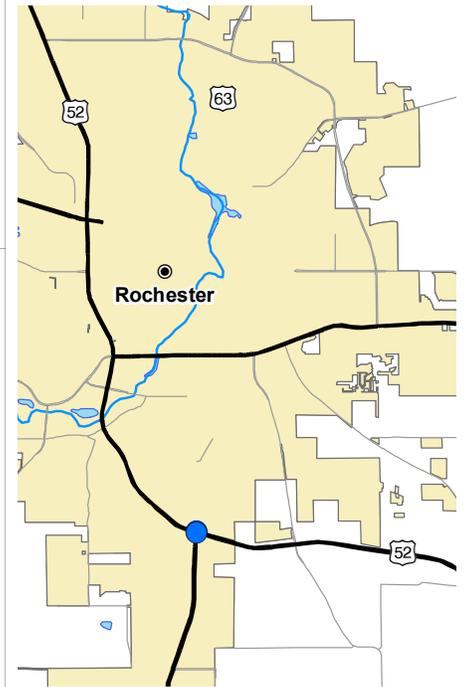


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**District Engineer:** Jeff Vlainck  
**Project Manager:** Kjersti Anderson  
**Revised Date:** 12/15/2016

## PROJECT SUMMARY

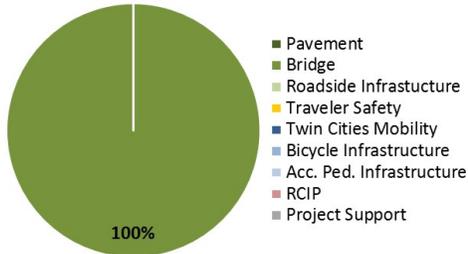
Hwy 52  
 Hwy 52 over Hwy 63  
 Bridge 55009, &, 55010  
 State Project No. 5507-63  
 NA



### Primary Purpose

Performance-based Need: Bridge

### Investment Category



### Project Description

This project is for the replacement of two bridge decks on Hwy 52 over Hwy 63 in Rochester. The deck surface conditions on these Hwy 52 bridges have deteriorated. Deck replacement is the objective of the project. The northbound Hwy 52 lane extension will be included along with bridge beam painting as a preservation measure.

### Recent Changes and Updates

The project is scoped. The bridge project will be bid and built in 2016. The two bridge decks on this project are deteriorating and are in need of replacement.

### Project History

This project will improve the conditions of Hwy 52 bridges, a principal arterial route on the National Highway System.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2014

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 4.0	\$ 4.5
Other Construction Elements:	\$ 0.2	\$ 0.1
Engineering:	\$ 0.7	\$ 0.7
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 4.9</b>	<b>\$ 5.3</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

Bridge redecking costs are estimated at \$90/S.F.

### Project Risks

Competitive bid may be higher or lower than expected.

### Schedule

Environmental Approval Date: Not Needed  
 Municipal Consent Approval Date: Not Needed  
 Geometric Layout Approval Date: Not Needed  
 Construction Limits Established Date: 10/15/2013  
 Original Letting Date: 01/27/2017  
 Current Letting Date: 01/29/2016  
 Construction Season: 2016  
 Estimated Substantial Completion: 11/2017



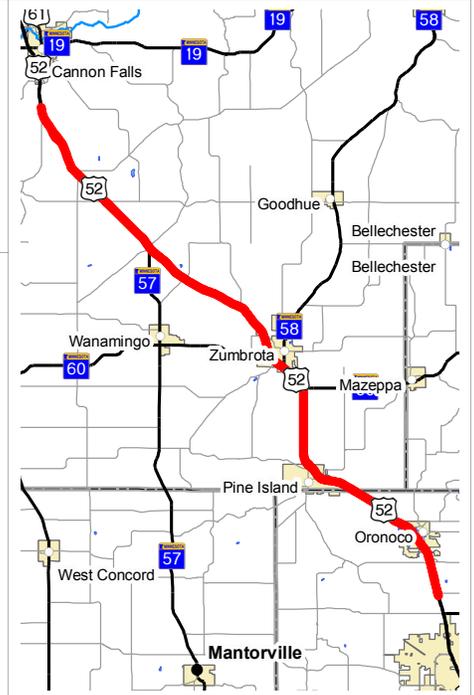
Minnesota Department of Transportation  
 District 6  
 2900 48th Street NW  
 (507) 286-7500

**District Engineer:** Jeff Vlamincik  
**Project Manager:** Richard Augustin

**Revised Date:** 12/15/2016

# PROJECT SUMMARY

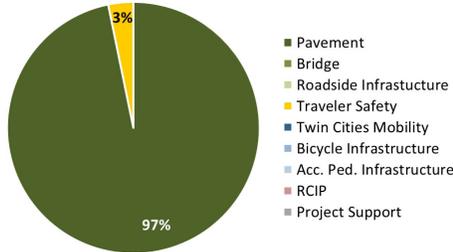
Hwy 52  
 Rochester to Cannon Falls  
 Bridge NA  
 State Project No. 2506-75  
 NA



## Primary Purpose

Performance Based Need: Pavement Condition

## Investment Category



## Project Description

This project is a mill and overlay of the northbound lanes on Hwy 52 from Rochester to Cannon Falls. The project covers about 27 miles. It also includes hydraulic improvements and turn lane extensions. Additionally Highway Safety Improvement Program funding was received in 2016 to install high tension cable median barrier from Oronoco to Zumbrota.

## Recent Changes and Updates

The project estimate was updated in March 2016 to include HSIP funds for the installation of high tension cable median barrier and for ramp pavement preservation work on Hwy 60 east.

## Project History

In 2008, the Ride Quality Index was below average and has decreased since that time. This segment of Hwy 52 is still in fair condition; however, it is starting to show signs of deterioration, which is expected to accelerate in the upcoming years. The project is needed to extend pavement life. This mill and overlay will include traffic safety and other improvements.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2013

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 10.4	\$ 7.3
Other Construction Elements:	\$ 0.6	\$ 0.9
Engineering:	\$ 1.4	\$ 2.6
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 12.4</b>	<b>\$ 10.8</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

The Current estimate reflects the awarded bid price for construction.

## Project Risks

No outstanding risks.

## Schedule

Environmental Approval Date: 7/18/2016  
 Municipal Consent Approval Date: NA  
 Geometric Layout Approval Date: NA  
 Construction Limits Established Date: TBD  
 Original Letting Date: 10/28/2016  
 Current Letting Date: 10/28/2016  
 Construction Season: 2017  
 Estimated Substantial Completion: 11/2017



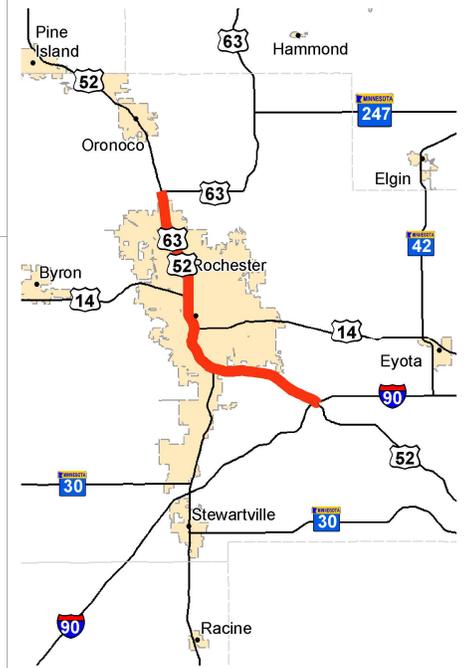
Minnesota Department of Transportation  
 District 6  
 2900 48th Street NW  
 (507) 286-7500

**District Engineer:** Jeff Vlamnick  
**Project Manager:** Heather Lukes

**Revised Date:** 12/15/2016

## PROJECT SUMMARY

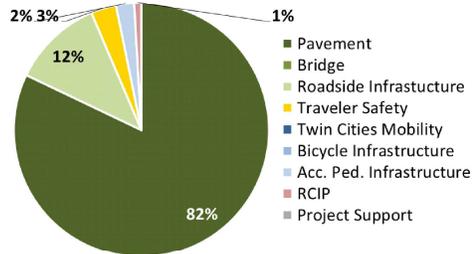
Hwy 52  
 Hwy 63 to just south of I-90  
 Bridge NA  
 State Project No. 5507-69  
 NA



### Primary Purpose

Performance Based Need: Pavement Condition

### Investment Category



### Project Description

This project is 11.8 mile bituminous overlay of Hwy 52 from Hwy 63 to I90 in Olmsted County. Other work will include overlay of ramps at CSAH 1 and CSAH 11 and hydraulic improvements.

### Recent Changes and Updates

The purpose of this project is to extend pavement service life and improve joint structures to reduce maintenance costs and improve safety.

The project was advanced into March 2018 as an ELLA.

### Project History

The pavement along Hwy 52 from Hwy 63 to I-90 is starting to show signs of deterioration and has seen accelerating deterioration in recent years. This segment of Hwy 52 is a 4-lane divided, rural expressway.

The ride quality index has dropped in both directions from 2010 to 2015. Potholes are starting to develop at the transverse joints in the concrete from damage caused by freezing and thawing, which creates maintenance and safety issues.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2016

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 6.4	\$ 7.2
Other Construction Elements:	\$ 0.5	\$ 0.5
Engineering:	\$ 1.2	\$ 1.2
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 8.1</b>	<b>\$ 8.9</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

Project costs are from the project scoping report from April 14, 2016 adjusted for new letting year and includes HSIP for HTC barrier.

### Project Risks

If the final project cost estimate comes in high then the project could be pushed out into a future letting date if funds are not available to cover the estimate.

### Schedule

Environmental Approval Date: Pending  
 Municipal Consent Approval Date: Not Needed  
 Geometric Layout Approval Date: Not Needed  
 Construction Limits Established Date: Pending  
 Original Letting Date: 11/22/2019  
 Current Letting Date: 3/23/2018  
 Construction Season: 2018  
 Estimated Substantial Completion: November 2018



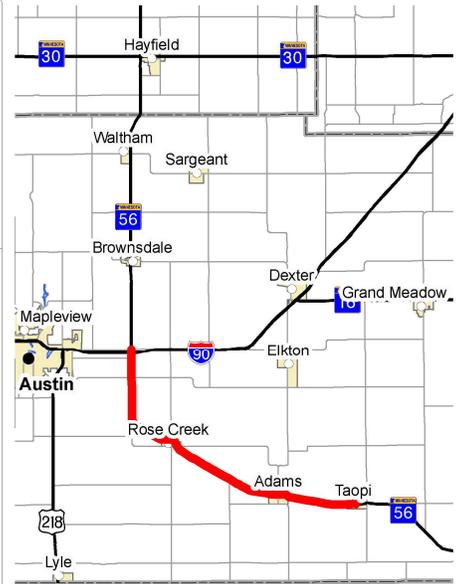
Minnesota Department of Transportation  
 District 6  
 2900 48th Street NW  
 (507) 286-7500

District Engineer: Jeff Vlaminck  
 Project Manager: Heather Lukes

Revised Date: 12/15/2016

# PROJECT SUMMARY

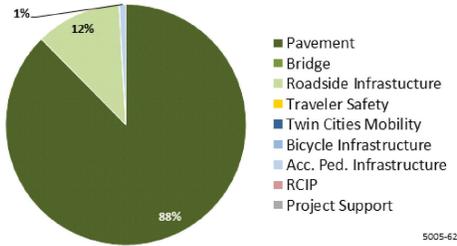
Hwy 56  
 Hwy 56 from Maple St. in Taopi to Hwy 46 in Mower County  
 Bridge NA  
 State Project No. 5005-62  
 NA



## Primary Purpose

Performance-based Need: Pavement

## Investment Category



## Project Description

This is a bituminous mill and overlay project on Hwy 56 in Taopi to Hwy 46. Included in this project is a regrade in the City of Adams. This regrade includes new sanitary, water main, storm sewer, lighting and landscaping.

## Recent Changes and Updates

Project prioritization factors delayed this project for several years. This project was originally proposed to be let in 2013.

One major change was the conversion from an ELLA to a 'non-ELLA' project. (A million dollars was added to the project). There was a letting change from the original Dec. 18, 2015 to Nov. 18, 2016.

Another major change was the removal of the rural culvert replacements which resulted in a budget change from \$6.831 million to \$6.214 million (removal of \$617,000). We then had a letting change in June from Nov. 18, 2016 to Jan. 27, 2017. One last major change was the decision to regrade adding what was previously estimated as an additional roughly \$120,000. There was a letting change in August from Jan. 27, 2017 to March 24, 2017.

## Project History

The purpose of this project is to preserve existing roadway structure, extend pavement life and improve ride quality.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2015

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 5.7	\$ 5.3
Other Construction Elements:	\$ 0.3	\$ 0.3
Engineering:	\$ 1.0	\$ 0.8
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 7.0</b>	<b>\$ 7.5</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

Project letting cost was \$5.25 million.

## Project Risks

No significant risks are anticipated.

## Schedule

Environmental Approval Date: 11/1/2016  
 Municipal Consent Approval Date: Not Needed  
 Geometric Layout Approval Date: 8/8/2016  
 Construction Limits Established Date: 05/07/2015  
 Original Letting Date: 01/25/2013  
 Current Letting Date: 03/24/2017  
 Construction Season: 2017  
 Estimated Substantial Completion: 11/2017



Minnesota Department of Transportation  
 District 6  
 2900 48th Street NW  
 (507) 286-7500

District Engineer: Jeffrey L Vlamincik  
 Project Manager: Kyle Lake

Revised Date: 12/15/2016

## PROJECT SUMMARY

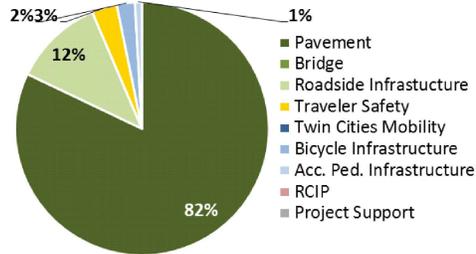
Hwy 60  
 Hwy 60 from Hwy 52 to 63  
 Bridge NA  
 State Project No. 7902-25  
 NA



### Primary Purpose

Performance-based Need: Pavement

### Investment Category



### Project Description

The project consists of a 12.1 mile bituminous mill and overlay, hydraulic improvements, and ADA improvements from Hwy 52 to Appledale Drive in Zumbro Falls.

### Recent Changes and Updates

Due to funding constraints and prioritizing District pavement improvements, this project was moved to FY22. The project will be rescoped in 2017.

### Project History

This project will preserve existing roadway structure, extend pavement life, and improve ride quality. ADA facilities will be brought into compliance.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2015

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 5.2	
Other Construction Elements:	\$ 0.0	
Engineering:	\$ 1.0	
Right of Way:	\$ 0.0	
<b>Total:</b>	<b>\$ 6.2</b>	

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

The baseline estimate is a pre-scoping level cost estimate only. The project will be re-scoped in 2017 and a new baseline estimate established.

### Project Risks

Competitive bid may be higher or lower than expected.

### Schedule

Environmental Approval Date: Pending  
 Municipal Consent Approval Date: Pending  
 Geometric Layout Approval Date: Pending  
 Construction Limits Established Date: Pending  
 Original Letting Date: 11/17/2017  
 Current Letting Date: 1/1/2022  
 Construction Season: 2022  
 Estimated Substantial Completion: 11/2022



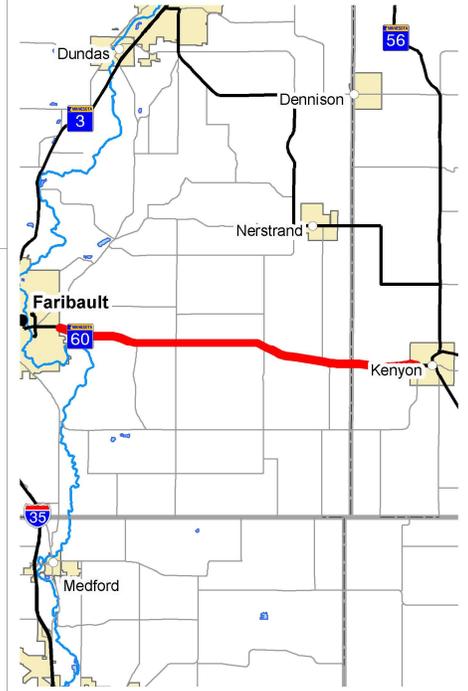
Minnesota Department of Transportation  
 District 6  
 2900 48th Street NW  
 (507) 286-7500

District Engineer: Jeff Vlaminck  
 Project Manager: Heather Lukes

Revised Date: 12/15/2016

## PROJECT SUMMARY

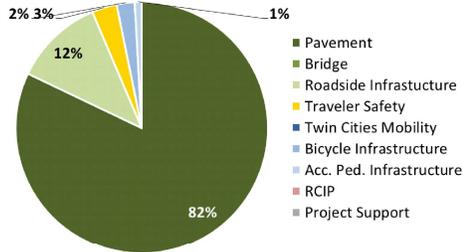
Hwy 60  
Faribault to Kenyon  
Bridge NA  
State Project No. 6607-49  
NA



### Primary Purpose

Performance Based Need: Pavement Condition

### Investment Category



### Project Description

This project is a mill and overlay of about 13 miles from the east end of the Straight River Bridge in Faribault to Huseth Ave in Kenyon.

### Recent Changes and Updates

Project was let and construction will be completed in fall 2017.

### Project History

Hwy 60 is a 2-lane minor arterial roadway. Pavement on this segment is deteriorating, which is expected to accelerate in the upcoming years. In 2013, the pavement was determined to be in poor condition. This project is needed to extend service life. This project will improve ride quality, service life and will include safety and other improvements.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2015

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 5.6	\$ 3.1
Other Construction Elements:	\$ 0.5	\$ 0.5
Engineering:	\$ 0.8	\$ 0.8
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 6.9</b>	<b>\$ 4.4</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

The cost estimates are from the project scoping report of July 16, 2015.

### Project Risks

Competitive bid may be higher or lower than expected.

### Schedule

Environmental Approval Date: TBD  
Municipal Consent Approval Date: NA  
Geometric Layout Approval Date: TBD  
Construction Limits Established Date: TBD  
Original Letting Date: 12/21/2018  
Current Letting Date: 4/28/2017  
Construction Season: 2018  
Estimated Substantial Completion: Nov 2018



Minnesota Department of Transportation  
District 6  
2900 48th Street NW  
(507) 286-7500

District Engineer: Jeff Vlamnick  
Project Manager: David Tsang

Revised Date: 12/15/2016

## PROJECT SUMMARY

Hwy 60  
Hwy 63 in Zumbro Falls to Hwy 61 in Wabasha  
Bridge NA  
State Project No. 7903-54  
NA



### Primary Purpose

Performance Based Need: Pavement Condition

### Investment Category

\*This project was designed and scoped before the current highway investment plan MnSHIP was developed, which breaks projects into investment categories.

### Project Description

The project is a 24.2 mile bituminous overlay of Hwy 60 from Hwy 63 to Hwy 61 in Wabasha County. Other work includes culvert improvement and replacements, guardrail improvements, and installation of rural lighting at CSAH 2 and CSAH 4.

### Recent Changes and Updates

The purpose of this project is to extend pavement service life and provide a safer roadway.

The project was advanced to Feb. 22, 2019 letting.

### Project History

Within the project limits, Hwy 60 is a 2-lane undivided, rural highway. The pavement along Hwy 60 is showing signs of deterioration. A majority of Hwy 60 has a ride quality index of fair but the roadway pavement does have a poor remaining service life of 0-3 years due to condition and age. There are also sections of roadway that have safety concerns, especially within the areas CSAH 2 and CSAH 4. These sections need safety improvements as indicated in the Highway Safety Plan. The plan also noted 13 curves as high risk.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2016

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 10.9	\$ 9.8
Other Construction Elements:	\$ 0.9	\$ 0.8
Engineering:	\$ 2.0	\$ 2.0
Right of Way:	\$ 0.1	\$ 0.2
<b>Total:</b>	<b>\$ 13.9</b>	<b>\$ 12.8</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

Project costs are from the project scoping report from April 14, 2016 and adjusted for inflation and lower assumed bit unit price.

### Project Risks

If the final project cost estimate comes in high then the project could be pushed out into a future letting date if funds are not available to cover the estimate.

Timeline to determine right of way impacts was reduced and may require a PIF to meet new letting.

### Schedule

Environmental Approval Date: Pending  
Municipal Consent Approval Date: Not Needed  
Geometric Layout Approval Date: Pending  
Construction Limits Established Date: Pending  
Original Letting Date: 10/26/2019  
Current Letting Date: 02/22/2019  
Construction Season: 2019  
Estimated Substantial Completion: October 2019



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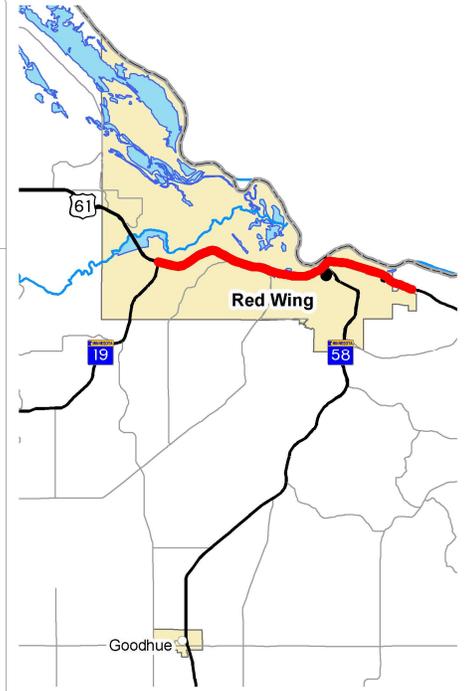
**District Engineer:** Jeff Vlamincik  
**Project Manager:** Heather Lukes

**Revised Date:** 12/15/2016

## PROJECT SUMMARY

Hwy 61  
Ready Mix entrance in Red Wing to Hwy 19  
Bridge NA  
State Project No. 2514-120

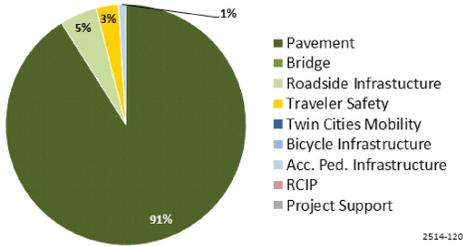
Substantially Complete



### Primary Purpose

Performance-based Need: Pavement

### Investment Category



### Project Description

This project on Hwy 61 from the Ready Mix entrance in Red Wing to Hwy 19 is a bituminous mill and overlay in the rural sections and a mill and fill on the urban sections. The project also included drainage and traffic safety improvements. Several medans will be closed and an acceleration lane will be constructed on the north end of the project.

### Recent Changes and Updates

This project was let in 2015 and construction is complete.

### Project History

The last bituminous overlay was placed in 1996 and followed up in 1998 with crack repair. As of 2011, the Ride Quality Index was rated as fair, but has continued to deteriorate. The project was proposed in 2012.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2012

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 4.5	\$ 4.2
Other Construction Elements:	\$ 0.4	\$ 0.4
Engineering:	\$ 0.9	\$ 0.9
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 5.7</b>	<b>\$ 5.5</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

No right of way was required and no environmental mitigation was needed.

### Project Risks

All risks have been retired.

### Schedule

Environmental Approval Date: 06/07/2015  
Municipal Consent Approval Date: NA  
Geometric Layout Approval Date: 2014  
Construction Limits Established Date: 06/07/2015  
Original Letting Date: 12/19/2014  
Current Letting Date: 12/19/2014  
Construction Season: 2015  
Estimated Substantial Completion: 11/2015



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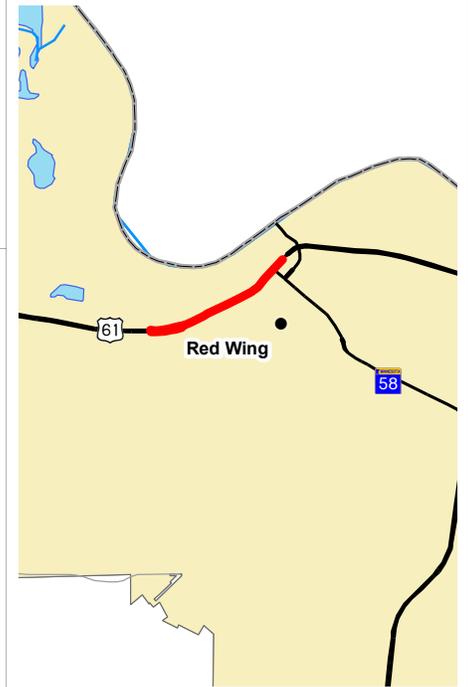
District Engineer: Jeff Vlaminck  
Project Manager: Chad Hanson

Revised Date: 12/15/2016

## PROJECT SUMMARY

Hwy 61  
Hwy 61 from Potter St. to Old West Main Stet  
Bridge NA  
State Project No. 2514-122  
[www.red-wing.org/th61home.html](http://www.red-wing.org/th61home.html)

**Substantially Complete**



### Primary Purpose

Performance-based Need: Pavement & District Safety Plan

### Investment Category

\*This project was designed and scoped before the current highway investment plan MnSHIP was developed, which breaks projects into investment categories.

### Project Description

This project is a reconstruction of Hwy 61 in Red Wing from Potter Street to Old West Main Street. This includes the replacement of city utilities, signal replacement at Old West Main Street and pedestrian and accessibility improvements.

### Recent Changes and Updates

This project was let in 2015 and construction is complete.

### Project History

This project started as a pedestrian safety project. The city of Red Wing applied for Municipal Agreements Program funding through District 6 and received funding to convert this to a mill and overlay along with enhanced pedestrian improvements. In 2013, the city applied for Corridor Investment Management Strategy funding and was selected to turn this project into a complete reconstruction.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2013

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 6.8	\$ 9.5
Other Construction Elements:	\$ 0.3	\$ 0.4
Engineering:	\$ 1.4	\$ 1.9
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 8.5</b>	<b>\$ 11.8</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

Bids came in in excess of \$1 million higher than the original estimate. MnDOT participation was capped, per the cooperative agreement, and the city understood that they were responsible for any costs overages. Due to the higher bid prices, MnDOT agreed to add \$500,000 to their original agreement amount.

### Project Risks

This project is complete and all risks have been retired.

### Schedule

Environmental Approval Date: N/A  
Municipal Consent Approval Date: 06/07/2015  
Geometric Layout Approval Date: 2014  
Construction Limits Established Date: 06/07/2015  
Original Letting Date: 2/1/2014  
Current Letting Date: 2/15/2015  
Construction Season: 2015/2016  
Estimated Substantial Completion: 8/2016



Minnesota Department of Transportation  
District 6  
2900 48th Street NW  
(507) 286-7500

**District Engineer:** Jeff Vlamincik  
**Project Manager:** Chad Hanson

**Revised Date:** 12/15/2016

## PROJECT SUMMARY

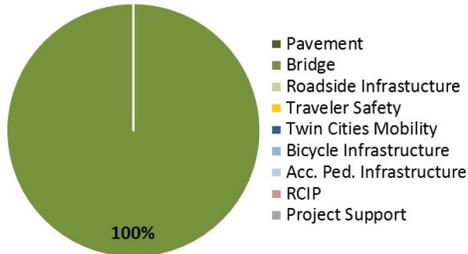
Hwy 61  
Hwy 61 in Red Wing  
Bridge 6483, &, 6482  
State Project No. 2514-121  
NA



### Primary Purpose

Performance-based Need: Bridge Condition

### Investment Category



### Project Description

This project replaces bridge #6483 over the abandoned C&NW Railroad on Hwy 61 and plugs bridge #6482 in Red Wing.

### Recent Changes and Updates

The District 6 work plan indicates that the current construction estimate is \$7.5 million, \$0.8 million less than the baseline estimate. The project was scoped and moved to FY 2025, (per 2016-2025 HIP dated Aug. 10, 2015).

### Project History

The project calls for the replacement of bridge #6483 because of its age and condition, along with reconstruction of the approaches to the bridge. It also plugs bridge #6482 in Red Wing.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2014

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 8.3	\$ 7.5
Other Construction Elements:	\$ 0.4	\$ 0.4
Engineering:	\$ 1.7	\$ 1.5
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 10.4</b>	<b>\$ 9.4</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

No right of way costs will be required.

### Project Risks

Competitive bids may be higher or lower than expected.

### Schedule

Environmental Approval Date: Not Needed  
Municipal Consent Approval Date: pending  
Geometric Layout Approval Date: pending  
Construction Limits Established Date: 10/11/2013  
Original Letting Date: 01/27/2017  
Current Letting Date: pending  
Construction Season: 2025  
Estimated Substantial Completion: pending



Minnesota Department of Transportation  
District 6  
2900 48th Street NW  
(507) 286-7500

**District Engineer:** Jeff Vlamincik  
**Project Manager:** TBD

**Revised Date:** 12/15/2016

# PROJECT SUMMARY

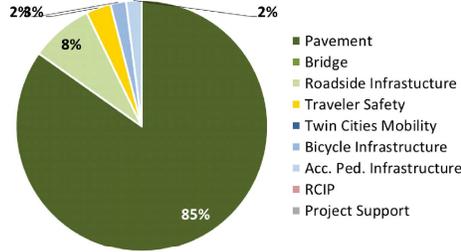
Hwy 61  
 Hwy 42 to just north of Lake City limits  
 Bridge NA  
 State Project No. 7906-96  
 NA



## Primary Purpose

Performance Based Need: Pavement Condition

## Investment Category



## Project Description

This is a mill and overlay of northbound and southbound lanes of Hwy 61 from Hwy 42 to the north of Lake City, except 1.7 miles of Hwy 61 within the city limits of Lake City. The portion within the city limits will be designed by the city and will be a complete reconstruct.

The project also includes construction of a 3/4 intersection and two RCUT intersections near Wabasha

## Recent Changes and Updates

The Traffic Section submitted a project for safety funding for the construction of a 3/4 intersection and two RCUT intersections near Wabasha. The project was selected and funding was secured. This work was added to this mill and overlay project. The city of Lake City will be converting a portion of TH 61 to a 3-lane section within the city limits in 2020. That section from West Elm Street to Central Point Rd. will be excepted out. The city will lead the design and MnDOT will let the project and do the contract administration for the reconstruction. Nearly all of the guard rail (~12 miles) will need to be replaced to bring it up to current safety standards, which was not in the original scope.

## Project History

This segment's Ride Quality Index ranges from 3.4 to 2.8. There is a need for improved pavement, shoulder ride quality and extended pavement life. This includes rehabilitation and replacement of deficient storm sewers and culverts, as well as low cost safety improvements, reconstruction of curb ramps, sidewalks and crosswalks, and median improvements along the north segment of Lake City.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2015

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 11.5	\$ 12.1
Other Construction Elements:	\$ 1.5	\$ 1.0
Engineering:	\$ 1.2	\$ 2.4
Right of Way:	\$ 0.0	\$ 0.1
<b>Total:</b>	<b>\$ 14.2</b>	<b>\$ 15.6</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

Several changes within the last year had significant impacts on the cost estimate, however the total estimate hasn't changed dramatically. The changes include:  
 -The portion within Lake City that will be reconstructed in 2020 was removed from this mill & overlay project.  
 -Approximately 12 miles of guardrail replacement were added to this project, which were not in the original scope.  
 -A 3/4 intersection and two RCUT intersections were added to the project.

## Project Risks

There is a significant amount of hydraulics improvements that will be included. The final recommendations are still not complete, however some of the work will be extremely challenging due to access on the steep slope and near the railroad. Coordination is ongoing with the Rail Office. A railroad agreement will be needed and will address the access issues. The slope also poses many challenges, since there are retaining walls, flumes, etc. that may be affected.

## Schedule

Environmental Approval Date: TBD  
 Municipal Consent Approval Date: Not needed  
 Geometric Layout Approval Date: 07/24/17  
 Construction Limits Established Date: 3/22/17  
 Original Letting Date: 10/19/2018  
 Current Letting Date: 10/19/2018  
 Construction Season: 2019  
 Estimated Substantial Completion: November 2019



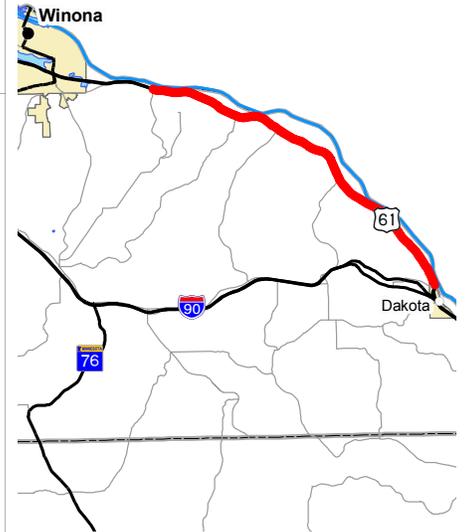
Minnesota Department of Transportation  
 District 6  
 2900 48th Street NW  
 (507) 286-7500

District Engineer: Jeff Vlamnick  
 Project Manager: Chad Hanson

Revised Date: 12/15/2016

## PROJECT SUMMARY

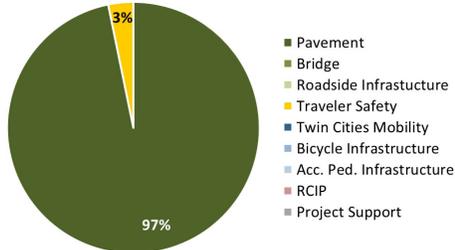
Hwy 61  
I-90 to Hwy 15 in Homer  
Bridge NA  
State Project No. 8504-79  
NA



### Primary Purpose

Performance Based Need: Pavement Condition

### Investment Category



### Project Description

This project is a mill and overlay on the northbound and southbound lanes of about 13 miles of Hwy 61 from north of I-90 to Hwy 15 in Homer.

### Recent Changes and Updates

The scoping report informed the Baseline Estimate and Current Estimate. The final hydraulics recommendations will be made in 2016, which will affect the project cost estimate.

### Project History

This segment of Hwy 61 is a 4-lane divided highway, mostly rural with some small urban segments. The pavement is starting to show signs of deterioration, which is expected to accelerate in the upcoming years. The project is needed to address the deterioration and to extend service life. The project will also include safety and other improvements.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2016

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 12.4	\$ 11.1
Other Construction Elements:	\$ 1.0	\$ 1.0
Engineering:	\$ 1.6	\$ 1.6
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 15.0</b>	<b>\$ 15.0</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

The Baseline and Current Estimates are from the project cost estimates in the scoping document dated April 27, 2015

### Project Risks

Competitive bid may be higher or lower than expected. 3.1 miles of frontage roads are currently owned by MnDOT. Discussions will occur over the coming year to determine if there is a possibility of turning these roads back to local jurisdiction.

### Schedule

Environmental Approval Date: NA  
Municipal Consent Approval Date: NA  
Geometric Layout Approval Date: NA  
Construction Limits Established Date: NA  
Original Letting Date: 12/21/2018  
Current Letting Date: 12/21/2018  
Construction Season: 2019  
Estimated Substantial Completion: 2019



Minnesota Department of Transportation  
District 6  
2900 48th Street NW  
(507) 286-7500

District Engineer: Jeff Vlamnick  
Project Manager: Chad Hanson

Revised Date: 12/15/2016

# PROJECT SUMMARY

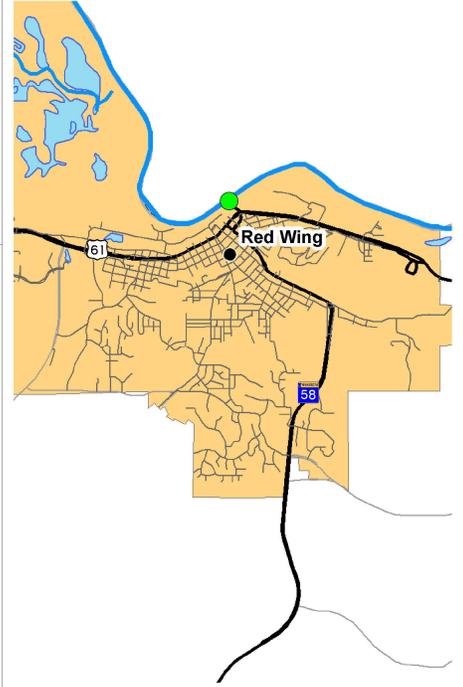
Hwy 63

Hwy 63 bridge over the Mississippi river and Hwy 61

Bridge 9040, &, 9103

State Project No. 2515-21

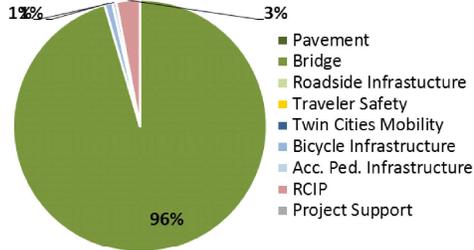
[www.dot.state.mn.us/d6/projects/redwing-bridge](http://www.dot.state.mn.us/d6/projects/redwing-bridge)



## Primary Purpose

Performance-based Need: Bridge Condition & Traffic Mobility Deficiencies

## Investment Category



## Project Description

The recommended alternative for this project is to replace both the Highway 63 bridge over the Mississippi River and the Highway 63 bridge over Highway 61 in Red Wing. The recommended approach roadway alternative in Red Wing is the buttonhook design that will create a new signalized intersection with Hwy 61 and Hwy 63. A jughandle design will be constructed on the Wisconsin approach.

A steel box girder structure over the Mississippi River was selected as the recommended bridge type.

A buttonhook approach, along with replacement of the bridge over Hwy 61, has been selected as the recommended

## Recent Changes and Updates

The project was let on March 8, 2017. Bids were competitive and significantly lower than the engineer's estimate.

Construction began in spring 2017.

## Project History

This river bridge is fracture critical and was put on the Chapter 152 Bridge list in 2008.

The bridge over Hwy 61 is on the National Register.

The original primary needs were to provide structurally sound crossings of the Mississippi River and Hwy 61; however, after significant traffic analysis, it was determined that traffic mobility in downtown Red Wing should also be a primary need.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2015

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 80.0	\$ 46.2
Other Construction Elements:	\$ 8.0	\$ 2.8
Engineering:	\$ 10.0	\$ 9.3
Right of Way:	\$ 2.0	\$ 3.0
<b>Total:</b>	<b>\$ 100.0</b>	<b>\$ 61.3</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

This is the letting cost & includes the Minnesota portion only.

Cost overruns and/or supplemental agreements could increase costs above the current estimate for Other Construction Elements.

All right-of-wis acquired.

## Project Risks

There is contamination on the Minnesota approach that will be impacted by construction. Extensive drilling and environmental investigations were completed and estimates were made for the total volume of contaminated material that will be impacted by construction. However, the exact amount will likely be different and will not be known until construction is underway.

There are poor soils on the Wisconsin appraoa, which require muck excavation and a surcharge. The total volume to be excavated was estimated, however if the poor soils are more extensive than anticipated then the costs could go up.

## Schedule

Environmental Approval Date: 4/21/16  
 Municipal Consent Approval Date: 11/23/15  
 Geometric Layout Approval Date: 2015  
 Construction Limits Established Date: 07/07/2015  
 Original Letting Date: 11/01/2017  
 Current Letting Date: 3/8/17  
 Construction Season: 2017-2020  
 Estimated Substantial Completion: 08/2020



Minnesota Department of Transportation  
 District 6  
 2900 48th Street NW  
 (507) 286-7500

District Engineer: Jeff Vlamincik  
 Project Manager: Chad Hanson

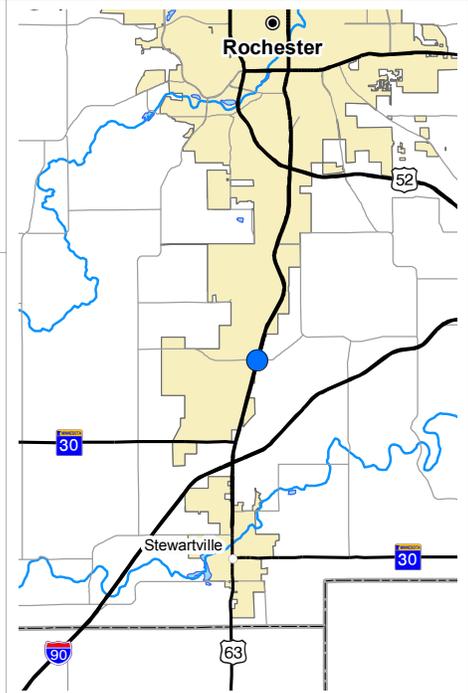
Revised Date: 12/15/2016

## PROJECT SUMMARY

Hwy 63  
County Road 16 interchange  
Bridge 55040  
State Project No. 5509-80

<http://www.co.olmsted.mn.us/planning/trnsprt/plng/2015airportinterchange/Pag>

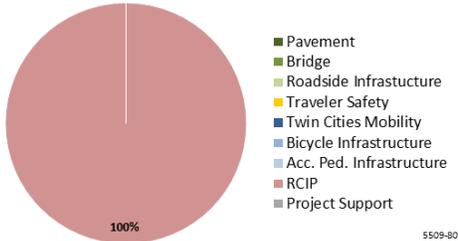
**Substantially Complete**



### Primary Purpose

Performance-based Need: District Safety Plan, TED Project

### Investment Category



### Project Description

This project will reconstruct the interchange of Hwy 16 and Hwy 63 in Olmsted County to address existing functional deficiencies. This design includes addressing inadequate sight distance, a narrow bridge deck, lack of turn lanes at ramp junctions, limited accommodation for non-motorized travel and poor access management within the interchange area.

The bridge reconstruction will also incorporate space for pedestrians and bicyclists to enhance safety on Hwy 16.

### Recent Changes and Updates

The project is complete.

### Project History

The project was let on June 2, 2015. Olmsted County is lead agency. The project will address existing functional deficiencies including: inadequate sight distance, a narrow bridge deck, lack of turn lanes at ramp junctions, limited accommodation for non-motorized travel and poor access management within the interchange area. Olmsted County was awarded a TED grant in July 2013 for \$2.224 million. MnDOT District 6 design staff will provide oversight. Project will be locally let.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2013

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 8.9	\$ 7.0
Other Construction Elements:	\$ 0.1	\$ 0.1
Engineering:	\$ 2.2	\$ 2.2
Right of Way:	\$ 0.4	\$ 0.4
<b>Total:</b>	<b>\$ 11.6</b>	<b>\$ 9.7</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

The Current Estimate reflects the bid amount. See Recent Changes section for further explanation.

### Project Risks

No further project risks are anticipated at this time

### Schedule

Environmental Approval Date: 09/09/2013  
Municipal Consent Approval Date: 1/5/15  
Geometric Layout Approval Date: 10/07/2014  
Construction Limits Established Date: 03/11/2014  
Original Letting Date: 02/16/2015  
Current Letting Date: 5/15/2015  
Construction Season: 2015/2016  
Estimated Substantial Completion: 11/2016



Minnesota Department of Transportation  
District 6  
2900 48th Street NW  
(507) 286-7500

**District Engineer:** Jeff Vlamincik  
**Project Manager:** Paul Schauer

**Revised Date:** 12/15/2016

## PROJECT SUMMARY

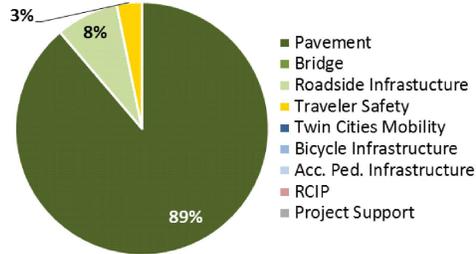
Hwy 63 and Hwy 60  
 Hwy 63 from Hwy 60 to CR 78 and Hwy 60 in Zumbro Falls  
 Bridge NA  
 State Project No. 7908-35  
 NA



### Primary Purpose

Performance-based: Pavement Condition

### Investment Category



### Project Description

This project is a bituminous mill and overlay on Hwy 63 from Hwy 60 to CR 78.

### Recent Changes and Updates

Project limits previously were from 75th Street in Olmsted County to Wabasha County Road 78. In 2015, the limit was changed to begin at the intersection of Hwy 60 in Zumbro Falls but still end at CR78.

This project will no longer include reconstruction of TH60 in Zumbro Falls. The TH60 work will now be included with a FY22 project, SP7902-25.

### Project History

This section of Hwy 63 is a two-lane rural highway. The ride quality index is low and starting to show signs of deterioration, which will be addressed to extend pavement life.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2015

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 8.6	\$ 4.0
Other Construction Elements:	\$ 0.0	\$ 0.2
Engineering:	\$ 1.7	\$ 0.8
Right of Way:	\$ 0.0	\$ 0.2
<b>Total:</b>	<b>\$ 10.3</b>	<b>\$ 5.0</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

The current estimate reflects the original project limits being modified. (See Recent Changes and Updates for detailed explanation). The current estimate is a scoping level estimate reflecting the new project limits of Hwy 63 from Hwy 60 to CR78 and updated to reflect inflation and lower bituminous price per ton.

### Project Risks

If the final project cost estimate comes in high then the project could be pushed out into a future letting date if funds are not available to cover the estimate.

PIF may be needed to keep February 2018 letting.

### Schedule

Environmental Approval Date: 07/06/2017  
 Municipal Consent Approval Date: Not Needed  
 Geometric Layout Approval Date: Not Needed  
 Construction Limits Established Date: 09/01/2016  
 Original Letting Date: 01/01/2018  
 Current Letting Date: 02/2018  
 Construction Season: 2018  
 Estimated Substantial Completion: 11/01/2018



Minnesota Department of Transportation  
 District 6  
 2900 48th Street NW  
 (507) 286-7500

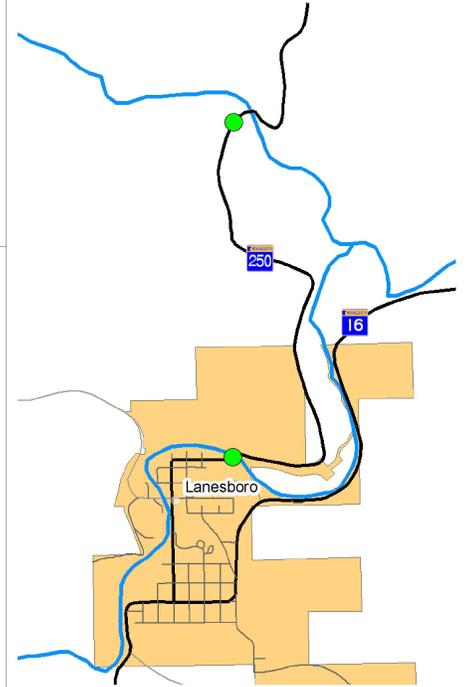
District Engineer: Jeff Vlamincik  
 Project Manager: Heather Lukes

Revised Date: 12/15/2016

## PROJECT SUMMARY

Hwy 250  
 Bridges on Hwy 250 in Lanesboro  
 Bridge 6975, 6977  
 State Project No. 2319-16  
[mndot.gov/d6/projects/hwy250-bridge/](http://mndot.gov/d6/projects/hwy250-bridge/)

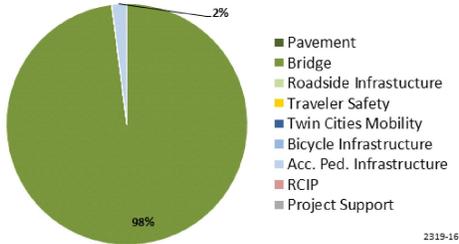
**Substantially Complete**



### Primary Purpose

Performance-based Need: Bridge Condition

### Investment Category



### Project Description

The project replaces bridges over the north and south branches of the Root River in and to the north of Lanesboro.

### Recent Changes and Updates

The project is complete.

### Project History

Bridge #6975 was built in 1931 and bridge #6977 was built in 1924. Both structures are classified as functionally obsolete.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2013

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 9.0	\$ 3.8
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 1.7	\$ 1.3
Right of Way:	\$ 0.3	\$ 0.2
<b>Total:</b>	<b>\$ 11.0</b>	<b>\$ 5.3</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

The environmental impacts of roadway approach work will not be significant. Traffic will be detoured during construction for bridge #6975.

### Project Risks

The risks have been removed or mitigated.

### Schedule

Environmental Approval Date: pending  
 Municipal Consent Approval Date: 8/3/15  
 Geometric Layout Approval Date: 05/14/2015  
 Construction Limits Established Date: 05/14/2015  
 Original Letting Date: 01/22/2016  
 Current Letting Date: 02/26/2016  
 Construction Season: 2016  
 Estimated Substantial Completion: 11/2016



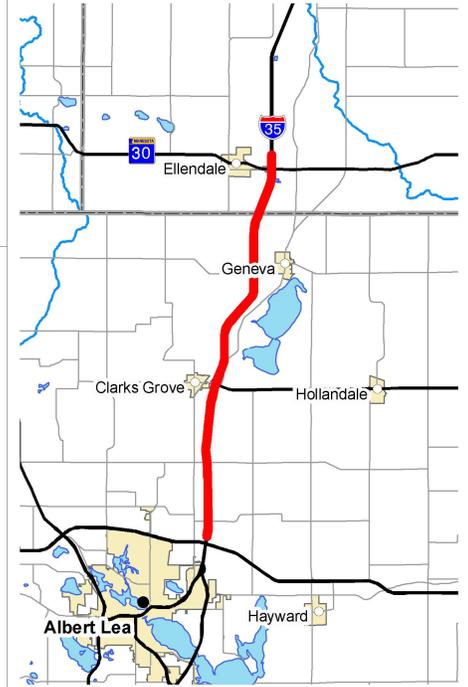
Minnesota Department of Transportation  
 District 6  
 2900 48th Street NW  
 (507) 286-7500

District Engineer: Jeff Vlamincik  
 Project Manager: Kjersti Anderson  
 Revised Date: 12/15/2016

## PROJECT SUMMARY

I-35  
Freeborn/Steele  
Bridge NA  
State Project No. 2480-104

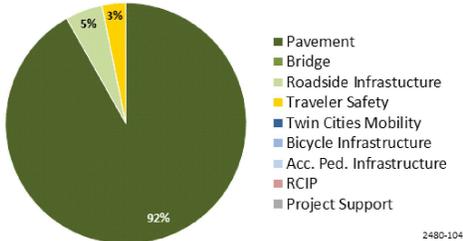
**Substantially Complete**



### Primary Purpose

Performance-based Need: Pavement & Roadside Infrastructure Condition

### Investment Category



### Project Description

This project will add a new layer of concrete roadway and replace drainage structures and guard rail for 14 miles along I-35 from Hwy 23 to Hwy 30.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2012

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 17.7	\$ 16.9
Other Construction Elements:	\$ 0.0	\$ 0.6
Engineering:	\$ 3.5	\$ 0.9
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 21.2</b>	<b>\$ 18.4</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Recent Changes and Updates

Project is complete. Competitive bid lower than estimated. Due to lower material costs.

### Project History

The purpose of the project is to replace the existing bituminous on the concrete roadway structure, extend pavement life and improve ride quality.

### Key Cost Estimate Assumptions

Standard practices were used to develop cost estimates. These estimates were taken from the most recent District 6 work plan.

### Project Risks

Competitive bid lower than expected.

### Schedule

Environmental Approval Date: 07/31/2014  
Municipal Consent Approval Date: NA  
Geometric Layout Approval Date: NA  
Construction Limits Established Date: 05/01/2014  
Original Letting Date: 11/20/2015  
Current Letting Date: 09/26/2014  
Construction Season: 2015  
Estimated Substantial Completion: 11/2015



Minnesota Department of Transportation  
District 6  
2900 48th Street NW  
(507) 286-7500

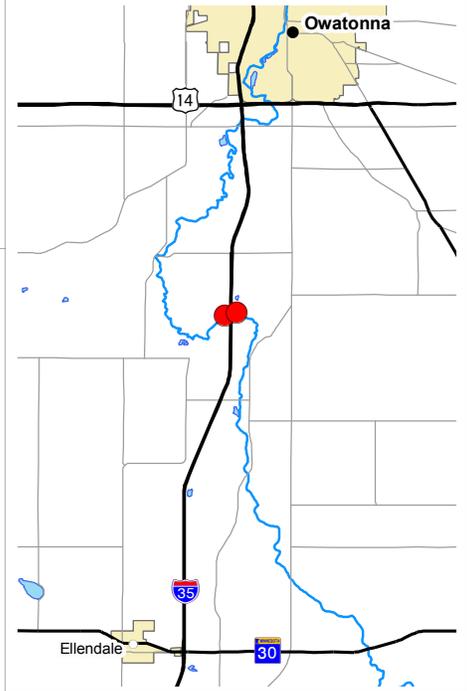
District Engineer: Jeffrey Vlamincik  
Project Manager: David Tsang

Revised Date: 12/15/2016

## PROJECT SUMMARY

I-35  
 Straight River Rest Area NB  
 Bridge NA  
 State Project No. 7480-124

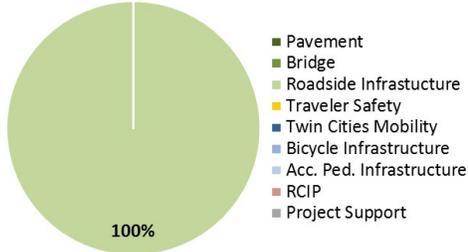
**Substantially Complete**



### Primary Purpose

Performance-based Need: Roadside Infrastructure Condition

### Investment Category



### Project Description

This project is for the replacement of the I-35 Straight River Rest Area.

### Recent Changes and Updates

Original letting was February 2016. Design delays caused letting date to be moved. This project was let on June 2, 2016 and is under construction. Project had one bidder.

### Project History

The Straight River Rest Area located on northbound I-35 is currently rated as the poorest rest area in District 6. The truck parking was designed using outdated semi-truck turning radius standards and is now considered inadequate. The building is deteriorating and the facility does not meet current ADA requirements.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2015

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 4.7	\$ 5.0
Other Construction Elements:	\$ 0.0	\$ 0.5
Engineering:	\$ 0.6	\$ 1.2
Right of Way:	\$ 0.0	\$ 0.7
<b>Total:</b>	<b>\$ 5.4</b>	<b>\$ 7.4</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

Project construction letting cost was \$4.98 million. 20% engineering used in current estimate.

### Project Risks

There are currently no outstanding risks on this project.

### Schedule

Environmental Approval Date: 03/01/2016  
 Municipal Consent Approval Date: Not Needed  
 Geometric Layout Approval Date: Not Needed  
 Construction Limits Established Date: 12/15/2015  
 Original Letting Date: 02/26/2016  
 Current Letting Date: 06/02/2016  
 Construction Season: 2016  
 Estimated Substantial Completion: 10/2016



Minnesota Department of Transportation  
 District 6  
 2900 48th Street NW  
 (507) 286-7500

**District Engineer:** Jeff Vlamincik  
**Project Manager:** Kyle Lake

**Revised Date:** 12/15/2016

## PROJECT SUMMARY

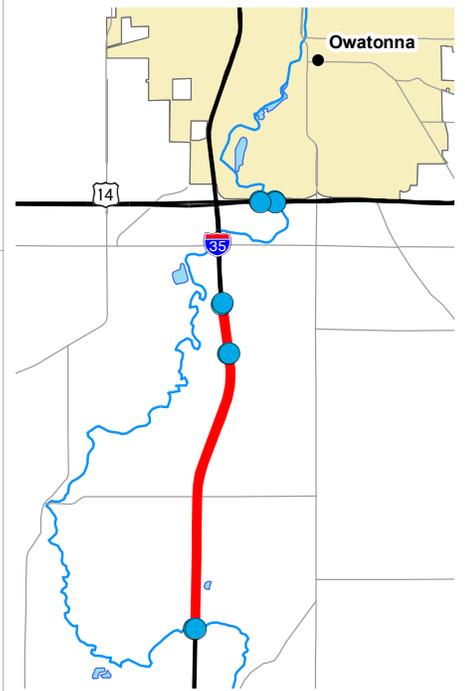
I-35

6 bridges on I-35 and 4 bridges on Hwy 14

Bridge 74807,74808,74823,74824,74804,74803,74001,74002,74003,74004

State Project No. 7480-126

<http://www.dot.state.mn.us/designbuild/steele-county-bridges/index.html>



### Primary Purpose

Performance Based Need: Bridge Condition

### Investment Category

\*This project was designed and scoped before the current highway investment plan MnSHIP was developed, which breaks projects into investment categories.

### Project Description

This project will be a design-build for replacement of six bridges on I-35 between Owatonna and Hope. The project also includes replacement of 4 bridges on Hwy 14 near Owatonna between I-35 and CR 45.

### Recent Changes and Updates

This project was let on March 16, 2016 and is under construction. Project will be complete in fall 2018.

### Project History

This project is being funded with additional state appropriation money. The project was initially funded at \$30M to reconstruct all 10 bridges. The price for 9 bridges came in at \$29.6M. The district identified a 10th bridge to include for a cost of a little over \$3M, which will be funded with district money.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2015

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 27.3	\$ 29.6
Other Construction Elements:	\$ 1.9	\$ 4.0
Engineering:	\$ 4.3	\$ 4.3
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 33.5</b>	<b>\$ 37.9</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

The Baseline Estimate assumed steel bridges on I-35 and Hwy 14 over the Union Pacific Railroad. The cost of these bridges may decrease if the portal opening can be reduced and the design optimized. The assumptions also included reconstructing Hwy 14 between the Union Pacific Railroad, the Straight River and approximately 250 feet of approach work at all of the other bridges.

### Project Risks

There is a medium risk of delay with getting design approval with Union Pacific Railroad.

### Schedule

Environmental Approval Date: 8/ 2010 EIS  
 Municipal Consent Approval Date: NA  
 Geometric Layout Approval Date: 12/2015  
 Construction Limits Established Date: 10/2015  
 Original Letting Date: 04/08/2016  
 Current Letting Date: 3/16/2016  
 Construction Season: 2016-2018  
 Estimated Substantial Completion: 11/2018



Minnesota Department of Transportation  
 District 6  
 2900 48th Street NW  
 (507) 286-7500

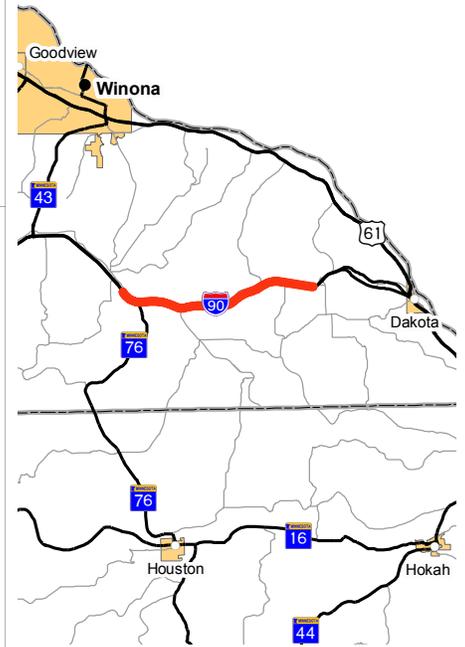
**District Engineer:** Jeff Vlamincik  
**Project Manager:** Tory Thompson

**Revised Date:** 12/15/2016

## PROJECT SUMMARY

I-90  
West of Hwy 76 to west of County Road 12  
Bridge NA  
State Project No. 8580-163

Substantially Complete



### Primary Purpose

Performance-based Need: Pavement & District Safety Plan

### Investment Category

\*This project was designed and scoped before the current highway investment plan MnSHIP was developed, which breaks projects into investment categories.

### Project Description

This project is a mill and overlay of 8 miles of I-90 from Hwy 76 to Hwy 12. The weigh station ramps will also be overlaid and drainage and safety improvements will be made.

### Recent Changes and Updates

This project will preserve existing roadway structure, extend pavement life, and improve ride quality.

### Project History

This section of I-90 was originally graded in 1971 and last overlaid in 1997 and 1998. In 2009 the pavement was rated in good condition with a Ride Quality Index (RQI) from 2.8 to 3.6. Project tied with SP 8502-33 (TH 43).

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2011

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 5.3	\$ 5.6
Other Construction Elements:	\$ 0.4	\$ 0.4
Engineering:	\$ 0.6	\$ 0.6
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 6.3</b>	<b>\$ 6.6</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

It was assumed there will be no right of way costs, a 1.5-inch mill and 3-inch overlay and that traffic will be maintained during construction. No crossovers or detour costs were included.

### Project Risks

Coordination will be needed to address maintenance of traffic issues at the Hwy 76 interchange. The project plans do not include replacing the approach panels, which will only be replaced on the bridges; however, the approach panels could be added at a later time.

### Schedule

Environmental Approval Date: Not Needed  
Municipal Consent Approval Date: Not Needed  
Geometric Layout Approval Date: Unknown  
Construction Limits Established Date: Unknown  
Original Letting Date: 01/24/2014  
Current Letting Date: 6/7/2013  
Construction Season: 2015  
Estimated Substantial Completion: 11/2015



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District 6  
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**District Engineer:** Jeff Vlamincik  
**Project Manager:** Richard Augustin

**Revised Date:** 12/15/2016

## PROJECT SUMMARY

I-90  
Winona  
Bridge 85830, 85844  
State Project No. 8580-165

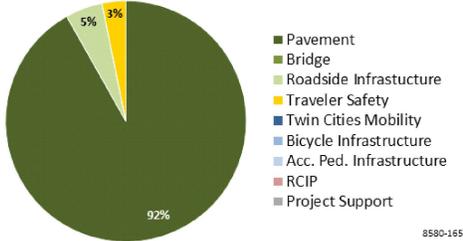
NA  
**Substantially Complete**



### Primary Purpose

Performance-based Need: Pavement & Roadside Infrastructure Condition

### Investment Category



### Project Description

This project will resurface the eastbound lanes of Hwy 90 with a concrete unbonded overlay. The ramps will be re-graded and several existing culverts will be replaced or repaired as a part of the project. Repairs will also include fixing separating pipes and aprons.

### Recent Changes and Updates

The project is substantially complete.

### Project History

The project changed from a bituminous mill and overlay to a concrete unbonded overlay. I-90 eastbound is in poor condition and needs repair. The purpose of the project is to improve ride quality and reduce maintenance costs.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2014

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 8.4	\$ 13.5
Other Construction Elements:	\$ 0.0	\$ 0.9
Engineering:	\$ 1.7	\$ 0.5
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 10.1</b>	<b>\$ 14.9</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

The Current Estimate reflects the bid amount, which had less competitive bids for the overlay.

### Project Risks

The risks are removed.

### Schedule

Environmental Approval Date: 9/27/2013  
Municipal Consent Approval Date: NA  
Geometric Layout Approval Date: NA  
Construction Limits Established Date: 08/15/2013  
Original Letting Date: 11/22/2013  
Current Letting Date: 11/22/2013  
Construction Season: 2014  
Estimated Substantial Completion: 2015



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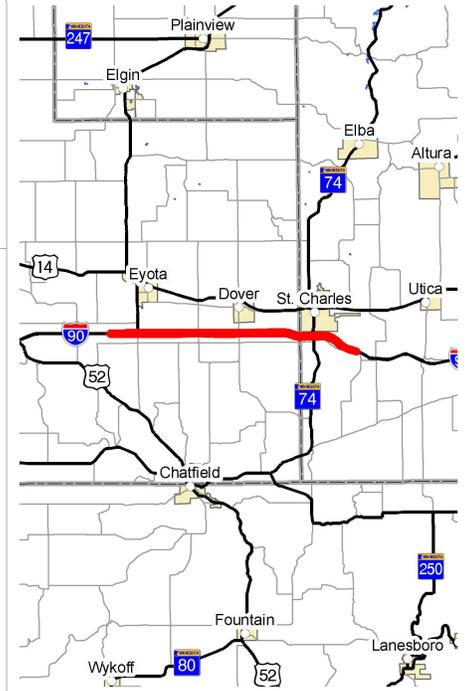
District Engineer: Jeff Vlaminck  
Project Manager: David Tsang

Revised Date: 12/15/2016

# PROJECT SUMMARY

I-90  
 East of County Road 19 to East of Hwy 74  
 Bridge 85817  
 State Project No. 5580-90

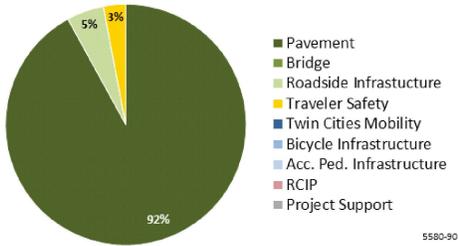
NA  
**Substantially Complete**



## Primary Purpose

Performance-based Need: Pavement

## Investment Category



## Project Description

This project will resurface 12 miles of the westbound lanes on I-90 from 2 miles east of Hwy 19 to 2 miles east of Hwy 74. The resurfacing will consist of an unbonded concrete overlay. The project also includes culvert repairs and improvements.

## Recent Changes and Updates

Project is completed.

## Project History

This section of the westbound lanes of I-90 was built in 1971 and overlayed in 1998. This highway segment is starting to deteriorate. The project will improve ride quality and reduce maintenance costs.

Bridge rehabilitation on bridge #85817 was added to the project. The bridge rehabilitation includes new bridge railings, end posts and resurfacing.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2014

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 13.5	\$ 17.0
Other Construction Elements:	\$ 0.0	\$ 0.8
Engineering:	\$ 2.7	\$ 0.5
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 16.2</b>	<b>\$ 18.3</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

The engineering estimate and higher anticipated concrete costs increased the Current Estimate. The Current Estimate includes bridge rehabilitation and is the bid amount.

## Project Risks

No project risks remain.

## Schedule

Environmental Approval Date: Unknown  
 Municipal Consent Approval Date: Need Unknown  
 Geometric Layout Approval Date: Unknown  
 Construction Limits Established Date: Unknown  
 Original Letting Date: 12/19/2014  
 Current Letting Date: 11/21/2014  
 Construction Season: 2015  
 Estimated Substantial Completion: 11/2015



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District Engineer: Jeff Vlaminck  
 Project Manager: Jacob Gasper

Revised Date: 12/15/2016

## PROJECT SUMMARY

I-90  
I-90 WB Lanes from Hwy13 to Hwy 46 (Petran)  
Bridge 9727  
State Project No. 2482-74  
NA



### Primary Purpose

Performance-based Need: Pavement  
Conditionperformance-based Need: Bridge Condition

### Investment Category

\*This project was designed and scoped before the current highway investment plan MnSHIP was developed, which breaks projects into investment categories.

### Project Description

This project will resurface 12 miles of the westbound lanes on I-90 from Hwy 13 to CR 46. The resurfacing will consist of an unbonded concrete overlay. The project also includes guardrail replacements, culvert repairs and improvements and re-decking of bridge 9727.

### Recent Changes and Updates

This project is being upscoped to an unbonded concrete overlay and will include re-decking Br. #9727.

This project was delayed and moved from a 2018 project to a 2019 project.

### Project History

This segment of I-90 is a 4-lane divided, rural highway. The pavement is starting to show signs of deterioration. This project will improve ride quality and reduce maintenance costs.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2015

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 4.9	\$ 19.2
Other Construction Elements:	\$ 0.3	\$ 0.8
Engineering:	\$ 0.7	\$ 1.5
Right of Way:	\$ 0.0	\$ 0.3
<b>Total:</b>	<b>\$ 5.9</b>	<b>\$ 21.8</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

#### Project Risks

Competitive bids may be higher or lower than expected. Final pavement recommendations will be made during the project development process. Final hydraulics recommendations will be made during project development, which could affect the overall cost estimate and traffic control.

### Schedule

Environmental Approval Date: pending  
Municipal Consent Approval Date: Not Needed  
Geometric Layout Approval Date: Not Needed  
Construction Limits Established Date: pending approval  
Original Letting Date: 11/17/2017  
Current Letting Date: 5/18/2018  
Construction Season: 2018-2019  
Estimated Substantial Completion: 11/2019



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District 6  
2900 48th Street NW  
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**District Engineer:** Jeff Vlamincik  
**Project Manager:** Jai Kalsy

**Revised Date:** 12/15/2016

## PROJECT SUMMARY

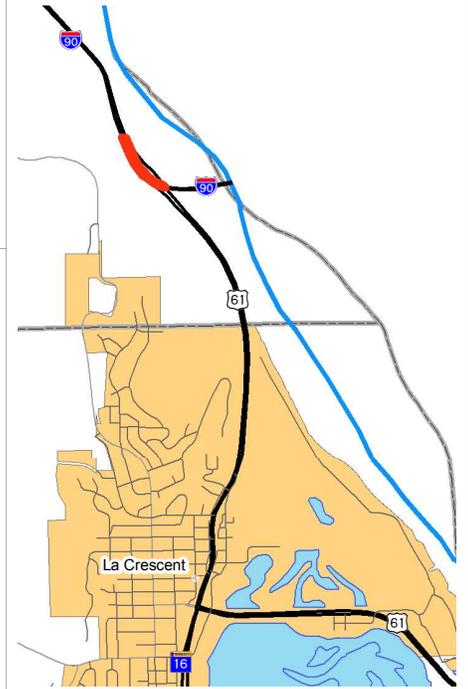
I-90

Mississippi River Bridges - Dresbach

Bridge 85801, &, 85802

State Project No. 8580-149

<http://www.dot.state.mn.us/dresbachbridge/index.html>



### Primary Purpose

Performance-based Need: Bridge Condition

### Investment Category

\*This project was designed and scoped before the current highway investment plan MnSHIP was developed, which breaks projects into investment categories.

### Project Description

This project will construct a new I-90 river bridge, which will include a reconstructed interchange that improves traffic safety, capacity and access on and between Hwy 61 and Hwy 14, as well as I-90. The project includes grading, concrete surfacing and bridge replacement. New and enhanced bicycle and pedestrian facilities will be provided along Hwy 61 and provisions for future bike/ped facilities are incorporated into the plans. Additionally, Wisconsin is funding a portion of the bridge replacement, including 100 percent of the Wisconsin approach costs.

### Recent Changes and Updates

The project is complete. The initial estimate was considerably higher because there were higher cost contingencies built into the preliminary level cost estimate. The project included a unique performance based construction staging and some maintenance of traffic provisions to bring contractor innovation. Since the project has moved forward, there is a much better view of the risks and contingencies. The Current Estimate reflects the bid amount.

Due to overruns and contract changes, including the State Line Prevailing Wage Change, the anticipated cost for the project is approximately \$193 million.

### Project History

The primary purpose of the project is to provide a new bridge on I-90 for an important regional river crossing, and to provide a reconstructed interchange that improves traffic safety, capacity and access on and between Hwy 61/Hwy 14 and I-90. The project will address identified bridge structural deficiencies, roadway operational problems, capacity needs, traffic safety concerns and riverfront access issues.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2009

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 265.5	\$ 187.5
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 28.1	\$ 24.8
Right of Way:	\$ 0.0	\$ 0.5
<b>Total:</b>	<b>\$ 293.6</b>	<b>\$ 212.8</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

Environmental impacts with the bridge and the roadway approach work are not significant. The U.S. Fish and Wildlife Services agrees to the right of way swap.

### Project Risks

The close proximity of this bridge to Hwy 61, the railroad tracks and the Minnesota rest area make roadway and bridge geometry challenging. Numerous environmental permits will be required.

Although the project is coming to a close, the contractor is working to remove the old bridge and the embankments at both abutments. The contractor also has to remove a temporary causeway and bridge that was used for access to the island and to facilitate bridge removal.

### Schedule

Environmental Approval Date: unknown  
 Municipal Consent Approval Date: Not Needed  
 Geometric Layout Approval Date: 12/7/2011  
 Construction Limits Established Date: 06/14/2011  
 Original Letting Date: 01/24/2012  
 Current Letting Date: 10/19/2012  
 Construction Season: 2013/2016  
 Estimated Substantial Completion: 11/2017



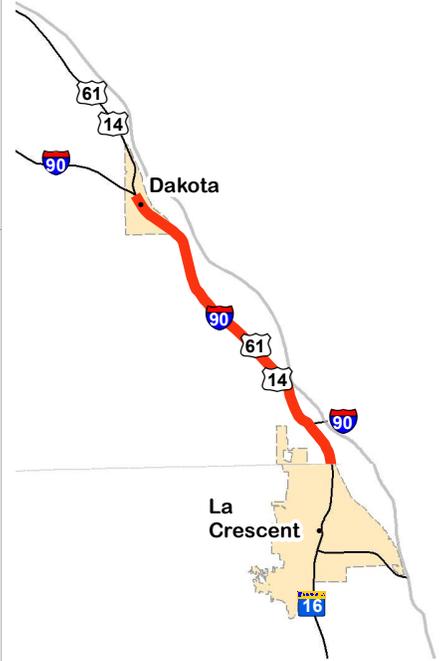
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 District 6  
 2900 48th Street NW  
 (507) 286-7500

**District Engineer:** Jeff Vlamincik  
**Project Manager:** Mark Anderson

**Revised Date:** 12/15/2016

## PROJECT SUMMARY

I-90  
Both westbound and eastbound lanes of I-90 in Winona County  
Bridge NA  
State Project No. 8580-167  
NA



### Primary Purpose

Performance Based Need: Pavement Condition

### Investment Category

\*This project was designed and scoped before the current highway investment plan MnSHIP was developed, which breaks projects into investment categories.

### Project Description

This project is a mill and overlay of both westbound and eastbound lanes on I-90 in Winona County. It involves various segments in each direction of I-90, including where it runs together with HWY 61. The overall project length is 5.9 miles.

### Recent Changes and Updates

The scoping report indicates the Baseline and Current Estimate. Final hydraulics recommendations will be made in 2016, which will affect the project cost estimate.

### Project History

This is a 4-lane interstate highway with reasonably high traffic volumes and a 70 mph speed limit. The pavement is starting to show signs of deterioration, which is expected to accelerate in the upcoming years. The project is needed to address the deterioration and to extend service life. The project will also include safety and other improvements.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2015

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 4.2	\$ 4.0
Other Construction Elements:	\$ 0.3	\$ 0.3
Engineering:	\$ 0.5	\$ 0.5
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 5.0</b>	<b>\$ 4.8</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

The Baseline and Current Estimates are scoping level cost estimates only. Final hydraulics recommendations in the final pavement determination will be paid during project development, which could affect the overall project cost. Bituminous cost increases could also affect the overall project estimate.

### Project Risks

If the final project cost estimate comes in high then the project could be pushed out into a future letting date if funds are not available to cover the estimate.

### Schedule

Environmental Approval Date: TBD  
Municipal Consent Approval Date: Not needed  
Geometric Layout Approval Date: Not needed  
Construction Limits Established Date: TBD  
Original Letting Date: 10/18/2019  
Current Letting Date: 10/18/2019  
Construction Season: 2020  
Estimated Substantial Completion: November 2020



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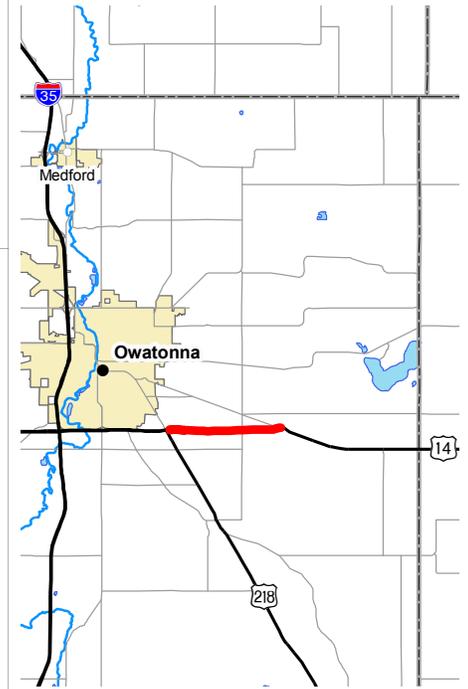
**District Engineer:** Jeff Vlamincik  
**Project Manager:** Chad Hanson

**Revised Date:** 12/15/2016

## PROJECT SUMMARY

Hwy 14  
Hwy 14 from Hwy 218 to CR 180 in Steele County  
Bridge 74X02  
State Project No. 7402-30

NA  
**Substantially Complete**



### Primary Purpose

Regional & Community Improvement Priority:  
Corridors of Commerce funding

### Investment Category

\*This project was designed and scoped before the current highway investment plan MnSHIP was developed, which breaks projects into investment categories.

### Project Description

This project expands Hwy 14 from 2 lanes to 4 lanes from Hwy 218 to CR 180. The roadway project also includes grading, concrete and bituminous paving, lighting and bridge No. 74X02.

### Recent Changes and Updates

This project was substantially completed in October 2015 and the new four-lane section opened to traffic. Right of way acquisition was significantly greater than had been estimated in the planning phase, which also increased the complexity and engineering cost.

### Project History

Construction includes expanding Hwy 14 from a two-lane to a four-lane concrete roadway. Hwy 14 westbound was constructed during 2014 and Hwy 14 eastbound will be reconstructed during 2015. Another construction item includes the construction of a box culvert.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2013

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 15.5	\$ 12.0
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 3.1	\$ 5.6
Right of Way:	\$ 0.0	\$ 5.6
<b>Total:</b>	<b>\$ 18.6</b>	<b>\$ 23.2</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

The Current Estimate reflects the awarded bid amount. Current estimates was higher than baseline because baseline was based on a planning level estimate completed at the time environmental documentation was done.

### Project Risks

There are currently no outstanding risks on this project.

### Schedule

Environmental Approval Date: 11/30/2010  
Municipal Consent Approval Date: Not Needed  
Geometric Layout Approval Date: 10/03/2013  
Construction Limits Established Date: 09/27/2013  
Original Letting Date: 04/25/2014  
Current Letting Date: 04/25/2014  
Construction Season: 2014 & 15  
Estimated Substantial Completion: 10/2015



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District 6  
2900 48th Street NW  
(507) 286-7500

**District Engineer:** Jeff Vlamincik  
**Project Manager:** Heather Lukes

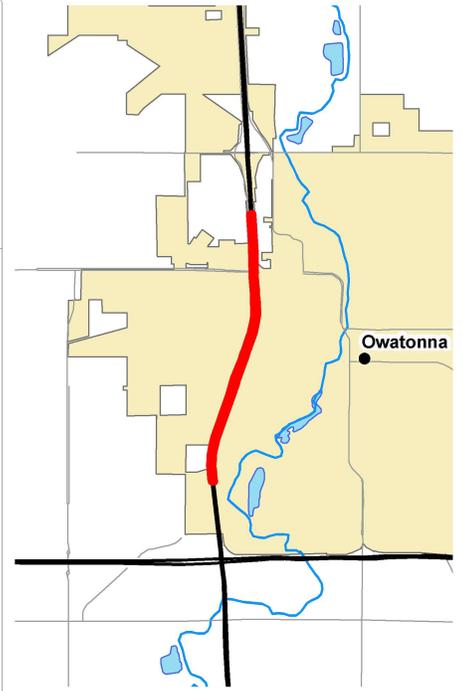
**Revised Date:** 12/15/2016

## PROJECT SUMMARY

I-35

5 miles south of Owatonna to Faribault  
 Bridge 74815, 74816, 74817, &, 74818  
 State Project No. 7480-113

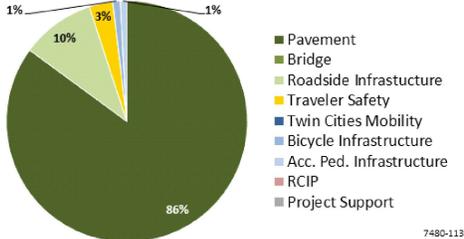
**Substantially Complete**



### Primary Purpose

Performance-based Need: Pavement & Bridge Condition

### Investment Category



### Project Description

This project will replace four bridges over I-35 in Owatonna. It will also reconstruct the pavement on northbound and southbound I-35 and construct an auxiliary lane on northbound and southbound I-35 from Bridge Street to old Hwy 14 west.

### Recent Changes and Updates

The project is complete.

### Project History

Each of the four bridges over I-35 in Owatonna are approximately 45-years-old, functionally obsolete and have various structural deficiencies. Two of the four bridges also span the Canadian Pacific Railroad. Traffic safety issues exist on I-35 for traffic entering from Hwy 14 west and to Bridge Street due to existing geometrics. Letting date pushed back to accommodate revisions necessary for best results and other priorities in the transportation system.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2010

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 34.1	\$ 24.1
Other Construction Elements:	\$ 0.0	\$ 1.0
Engineering:	\$ 6.8	\$ 4.8
Right of Way:	\$ 0.5	\$ 0.5
<b>Total:</b>	<b>\$ 41.4</b>	<b>\$ 30.4</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

The remainder of the project will be completed under traffic. Traffic will be one lane in each direction (head-to-head) in Owatonna.

### Project Risks

Railroad agreement with CPRR will be required for bridge replacement.

### Schedule

Environmental Approval Date: 12/26/2013  
 Municipal Consent Approval Date: NA  
 Geometric Layout Approval Date: 8/7/2013  
 Construction Limits Established Date: 08/02/2013  
 Original Letting Date: 01/23/2009  
 Current Letting Date: 02/28/2014  
 Construction Season: 2014  
 Estimated Substantial Completion: Fall 2015



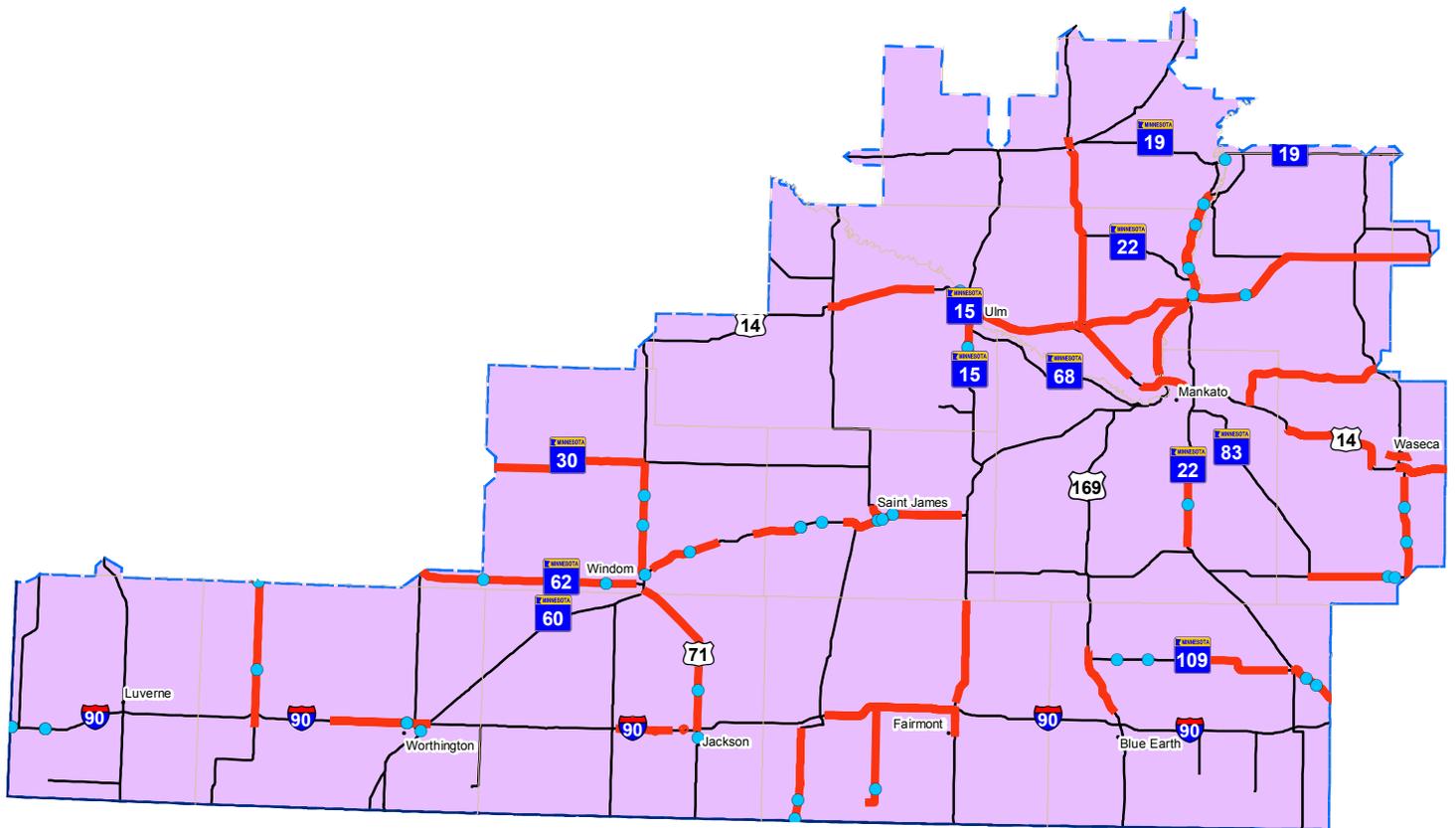
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District Engineer: Jeffrey Vlamincik  
 Project Manager: David Tsang

Revised Date: 12/15/2016

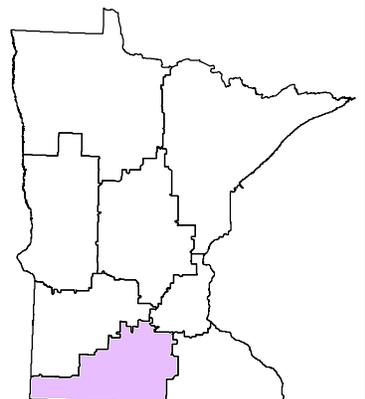
# Major Highway Projects 2017

## D7-MANKATO



### Major Highway Projects

- Bridge Projects
- Roadway Projects
- State Boundary
- County Line
- - - Construction District



## District Project Summary

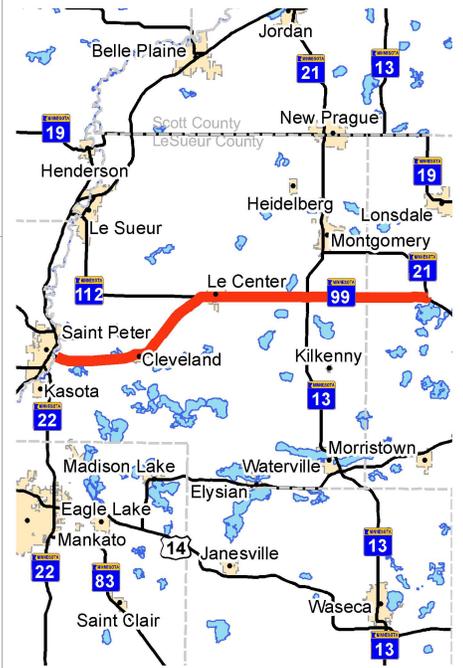
### District 7

Route	State Project #	Project Location	Page
Hwy 99	4010-10	CSAH 45 (Rabbit Road) to TH 21	F 2
Hwy 111, Hwy 22	5208-22	Hwy 111, 1st Street in Nicollet to TH 22 & TH 22, Th 111 to 280th St in Gaylord	F 3
Hwy 263	4609-17	County Rd 125 (Clark St) in Ceylon to I 90	F 4
Hwy 30	1701-27	CSAH 7 to TH 71	F 5
Hwy 99	5206-31	Birch St in Nicollet to S Jct Hwy 169 in St Peter	F 6
Hwy 14	5202-56	HWY 15 TO W OF HWY 99	F 7
Hwy 169	2208-113	S of CSAH 6 to N of CSAH 12 in Winnebago	F 8
Hwy 4	8302-38	South of 10th Ave to 11th Ave in St. James	F 9
Hwy 4	4601-32	Iowa border to Martin CSAH 26	F 10
Hwy 13	8101-57	Waseca to Hwy 30 in New Richland	F 11
Hwy 14	0804-81	New Ulm and junction with Hwy 15	F 12
Hwy 14	0803-38	Sleepy Eye	F 13
Hwy 14	5203-104	West of Nicollet to North Mankato	F 14
Hwy 14	0804-113	East limits of Sleepy Eye to west limits of New Ulm	F 15
Hwy 14	0702-125	North Mankato to Mankato	F 16
Hwy 15	0805-113	South of Searles to New Ulm	F 17
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Hwy 19	4004-112	Over the Union Pacific railroad, east of Sibley/LeSueur county line	F 19
Hwy 22	0704-100	Hwy 7 to Hwy 15	F 20
Hwy 30	8105-21	From Hwy 83 to New Richland	F 21
Hwy 60	1703-69	Windom to west of Mountain Lake	F 22
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Hwy 60	8309-52	Between St. James and Hwy 4 to Hwy 14	F 24
Hwy 60	4006-35	Hwy 14 to Hwy 13 in Waterville	F 25
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Hwy 71	3206-20	Jackson to Windom	F 27
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Hwy 169	5209-66	St. Peter to Le Sueur, south of the Minnesota River Bridge	F 50

# PROJECT SUMMARY

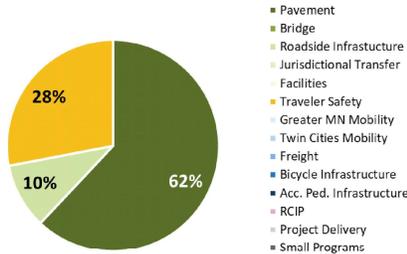
Hwy 99  
 CSAH 45 (Rabbit Road) to TH 21  
 Bridge 8893  
 State Project No. 4010-10  
 NA



## Primary Purpose

Performance Based Need: Pavement Condition

## Investment Category



## Project Description

This project is a mill and overlay on Hwy 99 from Hwy 13 to Hwy 21 for a distance of 8 miles. This area of the project includes culvert replacement, lighting, and turn lane additions.

The project also includes a section of Hwy 99 from the Minnesota River bridge to Le Center that was paved in 2017. This project area will include culvert repair, lighting, turn lanes, guardrail, bridge replacement, and minor mill and overlay work.

## Recent Changes and Updates

Due to deteriorating pavement, the district decided to split 4008-28 in to two projects. The first project was strictly a paving project in 2017 that encompassed Hwy 99 from the Minnesota river bridge to Le Center. The second project was added into SP4010-10 due to proximity. This work includes minor milling & overlay, culvert repair, turn lane modifications, bridge replacement, guardrail, and lighting.

## Project History

The project has been scoped and early development is underway. The project is scheduled to be constructed in 2019.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2015

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 3.9	\$ 8.6
Other Construction Elements:	\$ 0.3	\$ 0.7
Engineering:	\$ 0.9	\$ 1.7
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 5.1</b>	<b>\$ 11.0</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

The project estimate is based bituminous pavement, lighting, bridge replacement, culvert repair/replacement and guardrail work. The project estimate was inflated to 2019 dollars.

## Project Risks

The bridge replacement is in Cleveland, MN. The intent of the bridge (box culvert) replacement is to extend it beyond clear zone to remove guardrail along the roadway, which is a hazard. This will affect a park and will need additional analysis to ensure the extension impacts the park as little as possible. The project also includes some intersection improvements in Cleveland, MN. The modifications will need municipal consent.

## Schedule

Environmental Approval Date: Pending  
 Municipal Consent Approval Date: NA  
 Geometric Layout Approval Date: NA  
 Construction Limits Established Date: 11/27/2017  
 Original Letting Date: 12/14/2018  
 Current Letting Date: 12/21/2018  
 Construction Season: 2019  
 Estimated Substantial Completion: Fall 2019



Minnesota Department of Transportation  
 District 7  
 2151 Bassett Drive  
 (507) 304-6100

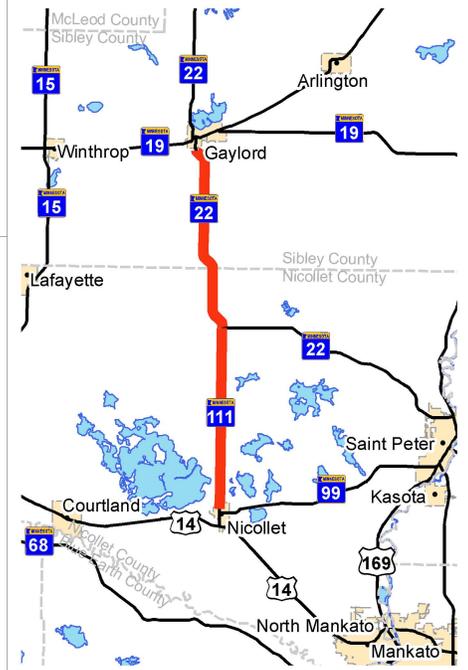
District Engineer: Greg Ous  
 Project Manager: Forrest Hasty

Revised Date: 12/15/2017

# PROJECT SUMMARY

Hwy 111, Hwy 22

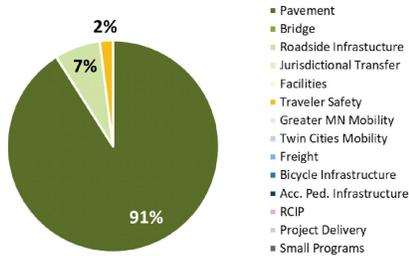
Hwy 111, 1st Street in Nicollet to TH 22 & TH 22, Th 111 to 280th St in Gaylord  
 Bridge NA  
 State Project No. 5208-22  
 NA



## Primary Purpose

Performance-based need: Pavement Condition

## Investment Category



## Project Description

The surface will be reclaimed and a new asphalt surface placed over the top. Repairs will be made to culverts as necessary. Lighting will be added at some county road intersections. Where landowners are agreeable, snow fences will be added in snow drifting areas. The City of Nicollet is interested in reconstructing the segment of Hwy 111 from Hwy 99 to the north end of town as an urban section. This would involve placing curb and gutter, storm sewer, and, possibly, sidewalks. This is not resolved yet.

## Recent Changes and Updates

The scope has been updated to focus the work on the pavement needs. The following items were eliminated from the scope because they were not satisfying performance based needs: Adding turn lanes at CR 4, CR 5, and CR 15; replacing Bridge 8721. Work has begun with landowners about possible snow drifting mitigation. The City of Nicollet is investigating possible reconstruction north of Hwy 99 in Nicollet.

## Project History

This project was identified as a resurfacing candidate. The pavement condition is fair and projected to be fair to poor before the project is constructed. A scoping review was completed by district staff during 2015. In this review the decision was made to provide for a bituminous reclamation. Additional scope was added to take care of problems while the surface was off the road. Following a review of the scope based on performance needs, new turn lanes and the box culvert bridge replacement were removed from the scope.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2016

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 13.4	\$ 11.3
Other Construction Elements:	\$ 1.1	\$ 0.9
Engineering:	\$ 2.4	\$ 2.0
Right of Way:	\$ 0.1	\$ 0.1
<b>Total:</b>	<b>\$ 17.2</b>	<b>\$ 14.3</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

The baseline cost estimate assumed included all the original scoped work. The current estimate assumes a 3-inch mill, reclamation, and 4.5-inch overlay. It assumed lighting at all paved county roads. Estimate was inflated to 2020.

## Project Risks

There is the risk that additional work will be added back in to the scope. The number of lights at county roads is not resolved. The snow fence locations are also not resolved and there is potentially more snow fence than originally anticipated.

## Schedule

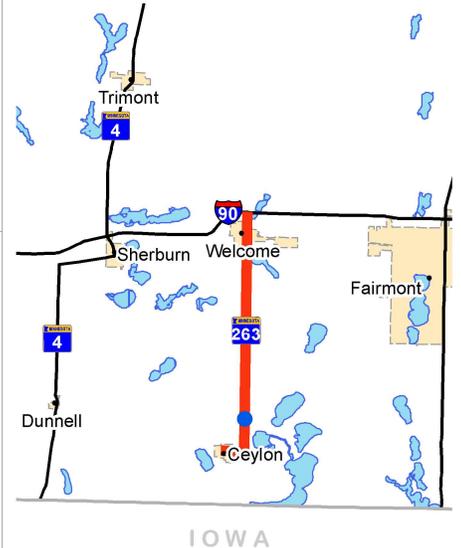
Environmental Approval Date: pending approval  
 Municipal Consent Approval Date: Not Needed  
 Geometric Layout Approval Date: Not Needed  
 Construction Limits Established Date: November 2017  
 Original Letting Date: 11/15/2019  
 Current Letting Date: 11/15/2019  
 Construction Season: 2020  
 Estimated Substantial Completion: November 2020



Minnesota Department of Transportation  
 District 7  
 2151 Bassett Drive  
 (507) 304-6100  
 District Engineer: Greg Ous  
 Project Manager: Peter Harff  
 Revised Date: 12/15/2017

## PROJECT SUMMARY

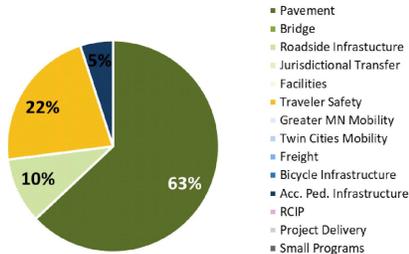
Hwy 263  
 County Rd 125 (Clark St) in Ceylon to I 90  
 Bridge 46010  
 State Project No. 4609-17  
 NA



### Primary Purpose

Performance-based need: Pavement Condition

### Investment Category



### Project Description

This project is a reclaim on Hwy 263 from Clark St. in Ceylon to the north I-90 ramps, for a distance of 11.2 miles. This project also improve sidewalks and curb ramps in Ceylon to bring them up to ADA standards. There will also be guardrail work on BR 46010, and lighting at a few county road intersections.

### Recent Changes and Updates

This project is currently planned to be a turn-back project. This section of roadway will be turned back to the county upon completion of the project in 2021.

### Project History

This is a new project.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2017

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 5.6	\$ 5.6
Other Construction Elements:	\$ 0.5	\$ 0.5
Engineering:	\$ 1.2	\$ 1.2
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 7.3</b>	<b>\$ 7.3</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

The estimate is based on the reclaim and ADA work. This is estimated in 2021 dollars.

### Project Risks

Getting land owner permission for snow fence locations. Unknown pipe issues.

### Schedule

Environmental Approval Date: Pending  
 Municipal Consent Approval Date: NA  
 Geometric Layout Approval Date: NA  
 Construction Limits Established Date: Pending  
 Original Letting Date: 11/20/2020  
 Current Letting Date: 11/20/2020  
 Construction Season: 2021  
 Estimated Substantial Completion: Fall 2021



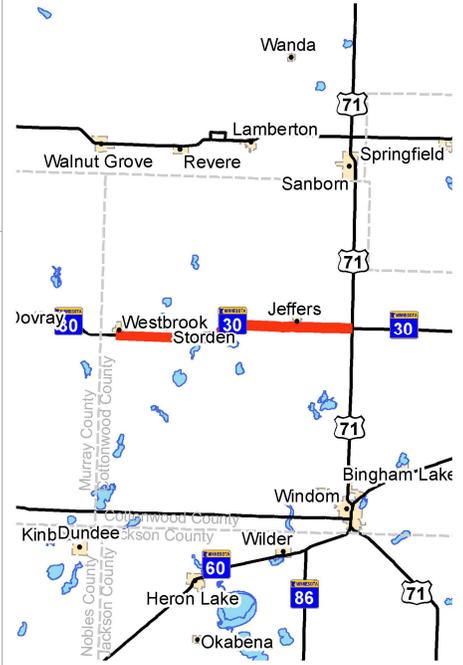
Minnesota Department of Transportation  
 District 7  
 2151 Bassett Drive  
 (507) 304-6100

District Engineer: Greg Ous  
 Project Manager: Forrest Hasty

Revised Date: 12/15/2017

# PROJECT SUMMARY

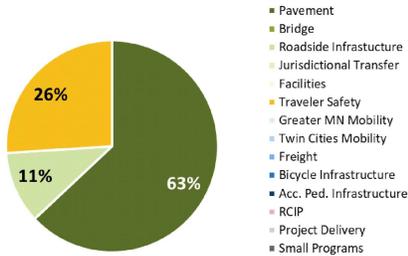
Hwy 30  
 CSAH 7 to TH 71  
 Bridge NA  
 State Project No. 1701-27  
 NA



## Primary Purpose

Performance-based need: Pavement Condition

## Investment Category



## Project Description

The surface will be milled and overlaid with asphalt. Following the milling, deteriorated joints will be repaired. Locations that do not have 2 feet of shoulder will be widened to allow for rumble strips. Lighting will be added at some intersections. Minor culvert repairs will be completed. Guardrail will be updated. Some accesses may be removed if landowners are willing. The work will be done with lane closures.

## Recent Changes and Updates

Scoping for this project has been completed.

## Project History

The project was identified as a resurfacing candidate. The pavement condition is fair and projected to be poor before the project is constructed. A scoping review was completed by district staff during 2016. The box culvert bridges do not require work under this project. If money becomes available this would be a candidate for an upslope to a bituminous reclamation. It was selected to enter the STIP as a project for FY 2021.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2017

	Baseline Est.	Current Est.
Construction Letting:	\$ 5.6	\$ 5.6
Other Construction Elements:	\$ 0.5	\$ 0.5
Engineering:	\$ 1.0	\$ 1.0
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 7.5</b>	<b>\$ 7.5</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

The estimate assumed 2-inch mill and 2-inch overlay. It assumed lighting at all paved county roads. Estimate was inflated to 2021.

## Project Risks

This project is a candidate for a bituminous reclamation. If additional funding is received it may be upscaled. There may be fewer county roads lighted than anticipated.

## Schedule

Environmental Approval Date: pending approval  
 Municipal Consent Approval Date: Not Needed  
 Geometric Layout Approval Date: Not Needed  
 Construction Limits Established Date: Not Needed  
 Original Letting Date: 12/18/2020  
 Current Letting Date: 12/18/2020  
 Construction Season: 2021  
 Estimated Substantial Completion: November 2021



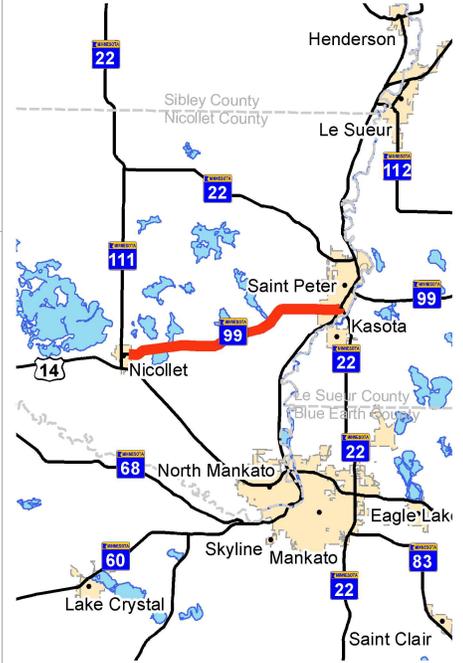
Minnesota Department of Transportation  
 District 7  
 2151 Bassett Drive  
 (507) 304-6100

District Engineer: Greg Ous  
 Project Manager: Peter Harff

Revised Date: 12/15/2017

# PROJECT SUMMARY

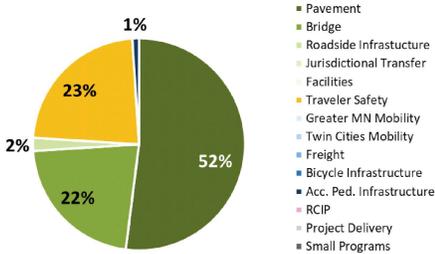
Hwy 99  
 Birch St in Nicollet to S Jct Hwy 169 in St Peter  
 Bridge NA  
 State Project No. 5206-31  
 NA



## Primary Purpose

Performance-based need: Pavement Condition

## Investment Category



## Project Description

The surface will be milled and overlaid with asphalt. Following the milling, deteriorated joints will be repaired. Locations that do not have 4 feet of shoulder will be widened to allow for rumble strips and a bike sharrow. Lighting will be added at some intersections. Major culvert repairs/replacements will be completed. Guardrail will be updated. Some accesses may be removed if landowners are willing. The work will be done with lane closures.

## Recent Changes and Updates

Scoping for this project has been completed.

## Project History

The project was identified as a resurfacing candidate. The pavement condition is fair and projected to be poor before the project is constructed. A scoping review was completed by district staff during 2016. The box culvert bridges require work under this project. If money becomes available this would be a candidate for an upslope to a bituminous reclamation. It was selected to enter the STIP as a project for FY 2021.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2017

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 5.4	\$ 5.4
Other Construction Elements:	\$ 0.4	\$ 0.4
Engineering:	\$ 1.0	\$ 1.0
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 6.8</b>	<b>\$ 6.8</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

The estimate assumed 4-inches mill and 4-inches overlay. It assumed lighting at all paved county roads. Estimate was inflated to 2021.

## Project Risks

This project is a candidate for a bituminous reclamation. If additional funding is received it may be upscooped. There may be fewer county roads lighted than anticipated.

## Schedule

Environmental Approval Date: 2019  
 Municipal Consent Approval Date: N/A  
 Geometric Layout Approval Date: N/A  
 Construction Limits Established Date: N/A  
 Original Letting Date: 10/23/2020  
 Current Letting Date: 10/23/2020  
 Construction Season: 2021  
 Estimated Substantial Completion: October 2021



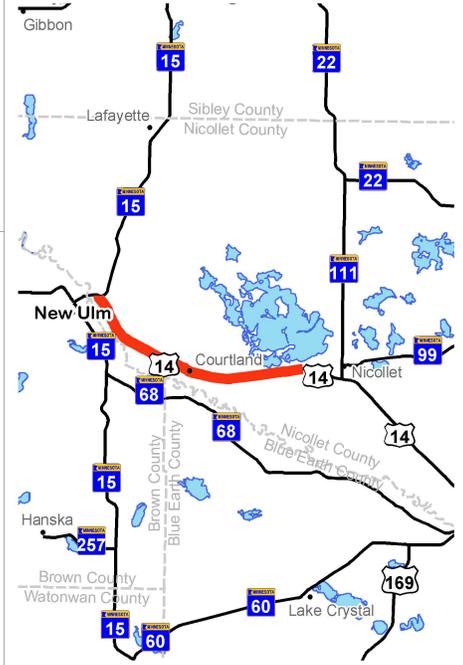
Minnesota Department of Transportation  
 District 7  
 2151 Bassett Drive  
 (507) 304-6100

District Engineer: Greg Ous  
 Project Manager: Robert Jones

Revised Date: 12/15/2017

# PROJECT SUMMARY

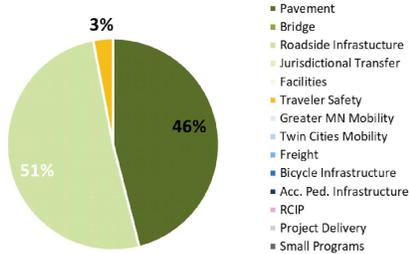
Hwy 14  
 HWY 15 TO W OF HWY 99  
 Bridge NA  
 State Project No. 5202-56  
 NA



## Primary Purpose

Performance-based need: Pavement Condition

## Investment Category



## Project Description

This project is about a 12-mile thin mill and overlay from New Ulm to Nicollet on Hwy 14 including repairs to drainage infrastructure.

## Recent Changes and Updates

No changes.

## Project History

The pavement is predicted to be poor by 2021. The purpose of this project is to achieve a smooth riding surface while minimizing long term pavement treatments given the potential for a future 4-lane expansion on this section of roadway.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2017

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 8.6	\$ 8.6
Other Construction Elements:	\$ 0.7	\$ 0.7
Engineering:	\$ 1.5	\$ 1.5
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 10.8</b>	<b>\$ 10.8</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

Cost estimate was prepared of a preliminary itemized cost estimate using 2016 costs and inflating to 2021.

## Project Risks

Depending on the development of the future 4-lane expansion of Hwy 14, this projects limits and improvements could drastically change.

## Schedule

Environmental Approval Date: Need unknown  
 Municipal Consent Approval Date: Not needed  
 Geometric Layout Approval Date: Not needed  
 Construction Limits Established Date: Not needed  
 Original Letting Date: 12/18/2020  
 Current Letting Date: 12/18/2020  
 Construction Season: Summer 2021  
 Estimated Substantial Completion: September 2021



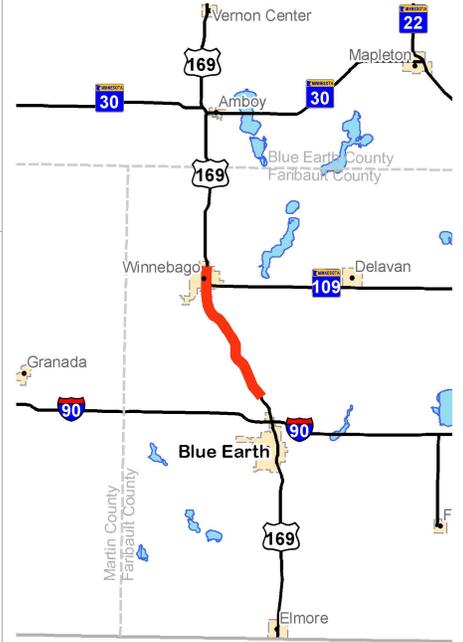
Minnesota Department of Transportation  
 District 7  
 2151 Bassett Drive  
 (507) 304-6100

District Engineer: Greg Ous  
 Project Manager: Zachary Tess

Revised Date: 12/15/2017

# PROJECT SUMMARY

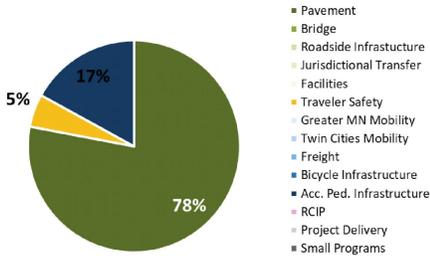
Hwy 169  
 S of CSAH 6 to N of CSAH 12 in Winnebago  
 Bridge NA  
 State Project No. 2208-113  
 NA



## Primary Purpose

Performance-based need: Pavement Condition

## Investment Category



## Project Description

This project is an overlay on Hwy 169 from just south of CSAH 6 to just north of Winnebago, for a distance of 7.74 miles. The rural section of this project will also receive an Ultra-Thin Bonded Wear Coarse over the bituminous overlay. This project also improves sidewalks and curb ramps in Winnebago to bring them up to ADA standards. There will also be lighting upgrades to two county road intersections.

## Recent Changes and Updates

Recently this project changed from an Ultra-Thin Bonded Wear Coarse to an overlay and the UTBWC. The pavement deteriorated faster than anticipated.

## Project History

The purpose of this project is to provide a smooth riding surface and reconstruct the failing sidewalk and pedestrian ramps in Winnebago to meet ADA guidelines. The project was scoped and a minimal amount of risks were identified. The project scope was modified to bring the sidewalk up to current ADA standards in addition to the pedestrian ramps. The letting was changed to align with a scheduled letting date after the project was selected.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 9/2015

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 3.8	\$ 4.1
Other Construction Elements:	\$ 0.3	\$ 0.3
Engineering:	\$ 0.8	\$ 0.9
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 4.8</b>	<b>\$ 5.4</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

Project baseline was for only an ultra thin bond wear coarse. The estimate is based on bituminous pavement, Ultra-Thin Bonded Wear Coarse and ADA work. This is estimated for 2018 construction.

## Project Risks

There is not a detour planned for this project, which could make some utility modifications difficult in Winnebago.

## Schedule

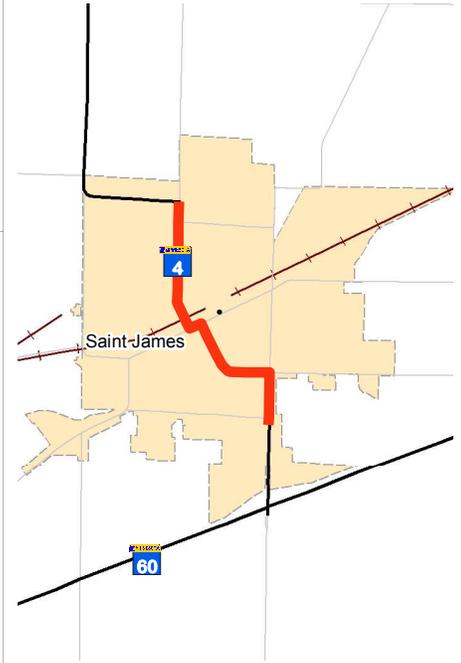
Environmental Approval Date: 7-14-17  
 Municipal Consent Approval Date: NA  
 Geometric Layout Approval Date: NA  
 Construction Limits Established Date: 12-14-15  
 Original Letting Date: 10/27/2017  
 Current Letting Date: 4/27/2018  
 Construction Season: 2018  
 Estimated Substantial Completion: Nov. 2018



Minnesota Department of Transportation  
 District 7  
 2151 Bassett Drive  
 (507) 304-6100  
 District Engineer: Greg Ous  
 Project Manager: Forrest Hasty  
 Revised Date: 12/15/2017

# PROJECT SUMMARY

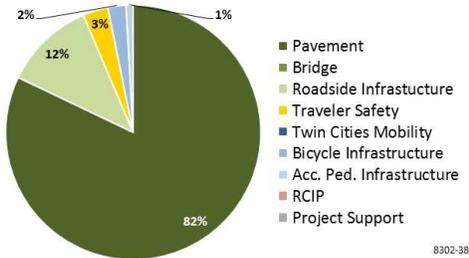
Hwy 4  
 South of 10th Ave to 11th Ave in St. James  
 Bridge NA  
 State Project No. 8302-38  
 mndot.gov/stjames



## Primary Purpose

Performance-based Need: Pavement

## Investment Category



## Project Description

This is a roadway reconstruction project for 1.6 miles in St James from south of 10th Ave S. to 11th Ave N.

The sidewalk will be replaced and constructed to meet ADA standards. The storm sewer, sanitary sewer and water main will be replaced. Mini-roundabouts will be built to replace the existing signals in town to optimize the flow of traffic.

## Recent Changes and Updates

Project is nearing completion on its second year of construction with a third and final construction season for 2018.

## Project History

The city approved the geometric layout. A consultant was procured for the final design work. The letting date changed to align with a scheduled letting date after the project was programmed. Some temporary easements will be needed in the process of making the sidewalks ADA compliant. The existing 1951 concrete throughout the corridor is in very poor condition. Multiple city utility breaks occur each winter due to poor utilities below the roadway. The project was first let in February 2016 and all bids were rejected, with the lowest being \$18.8 million. The reasons for the bids being well over the estimate include tight staging requirements, specifications for contaminated soil handling, and a less competitive bidding environment. Staging was revised and the project was re-bid in May 2016 giving contractors an additional year for construction work. The low bid was at \$15.7 million.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2012

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 5.3	\$ 15.7
Other Construction Elements:	\$ 0.4	\$ 0.7
Engineering:	\$ 1.0	\$ 1.5
Right of Way:	\$ 0.2	\$ 0.2
<b>Total:</b>	<b>\$ 6.9</b>	<b>\$ 18.1</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

The construction cost breakdown is: MnDOT's share - \$8.1 million; city share - \$6.9 million; and county share - \$0.6 million. The current estimate is based on the awarded contract from the May 2016 letting.

## Project Risks

While in construction with the majority of the underground work complete, the project risks are mostly related to construction schedule with the contractor; however, the project is still expected to be complete in 2018.

## Schedule

Environmental Approval Date: 11/23/2015  
 Municipal Consent Approval Date: 12/02/2014  
 Geometric Layout Approval Date: 4/10/2015  
 Construction Limits Established Date: Summer 2015  
 Original Letting Date: 6/30/2016  
 Current Letting Date: 5/22/2016  
 Construction Season: 2016-2018  
 Estimated Substantial Completion: Dec. 2018



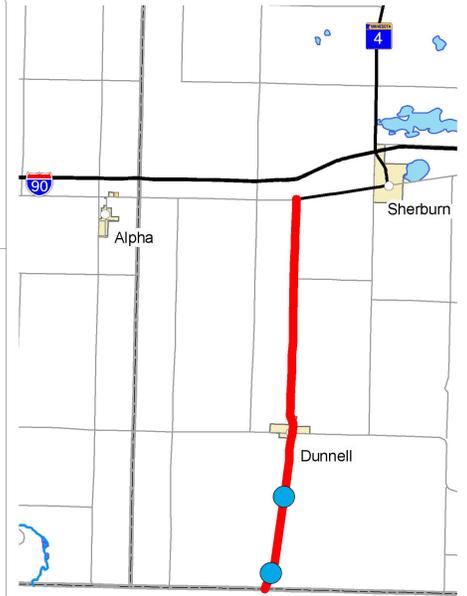
Minnesota Department of Transportation  
 District 7  
 2151 Bassett Drive  
 (507) 304-6100

**District Engineer:** Greg Ous  
**Project Manager:** Zachary Tess

**Revised Date:** 12/15/2016

# PROJECT SUMMARY

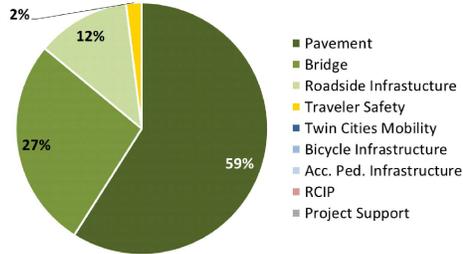
Hwy 4  
Iowa border to Martin CSAH 26  
Bridge 3572, &, 3878  
State Project No. 4601-32  
NA



## Primary Purpose

Performance-based Need: Pavement

## Investment Category



## Project Description

The project consists of a mill and overlay for the rural section of Hwy 4 in Martin County, from the Iowa border to the west junction of Martin CSAH 26, located southwest of Sherburn. It will also replace two bridges with new box culverts. The box culvert installations will require the roadway to be detoured during construction. The project length is about 10.1 miles.

## Recent Changes and Updates

Repairs to the highway crossing culverts and bridges further investigated to determine right of way needs.

## Project History

The project was shifted from fiscal year 2018 to 2019 as a ripple effect of projects coming in over estimate in 2016.

This project will resurface the pavement to achieve a smooth riding surface and improve the ride quality index. The project also includes replacing two bridges (#3572 and #3878) with new box culverts.

In 2013, the pavement was near the end of its service life and the ride quality was poor. Both bridges need replacement.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2015

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 6.1	\$ 6.7
Other Construction Elements:	\$ 0.5	\$ 0.5
Engineering:	\$ 1.1	\$ 1.3
Right of Way:	\$ 0.0	\$ 0.1
<b>Total:</b>	<b>\$ 7.7</b>	<b>\$ 8.6</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

It is assumed that the project is a mill and overlay. The current estimate is in 2016 dollars inflated to 2019.

## Project Risks

The life cycle cost analysis may show an alternate fix has the lowest life cycle cost. If a more substantial fix is required that requires raising the road grade or includes subgrade corrections, the costs may increase significantly. The project contingency does not include a change for this type of major risk.

## Schedule

Environmental Approval Date: Pending Approval  
Municipal Consent Approval Date: Not Needed  
Geometric Layout Approval Date: Need Unknown  
Construction Limits Established Date: 6/12/2017  
Original Letting Date: 1/26/2018  
Current Letting Date: 1/25/2019  
Construction Season: 2019  
Estimated Substantial Completion: Fall 2019



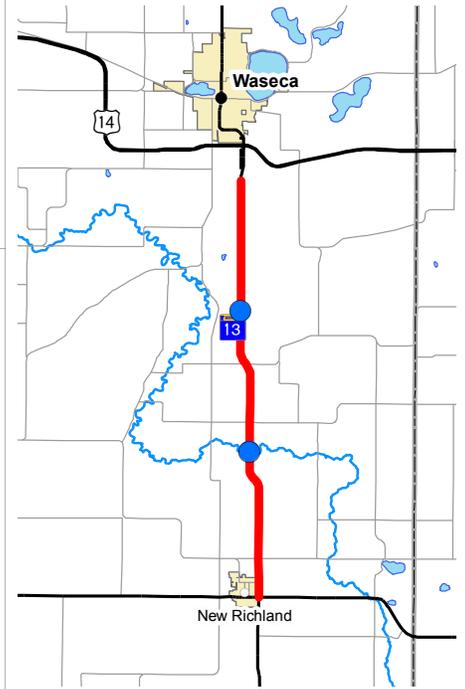
Minnesota Department of Transportation  
District 7  
2151 Bassett Drive  
(507) 304-6100

District Engineer: Greg Ous  
Project Manager: Glen Coudron

Revised Date: 12/15/2016

# PROJECT SUMMARY

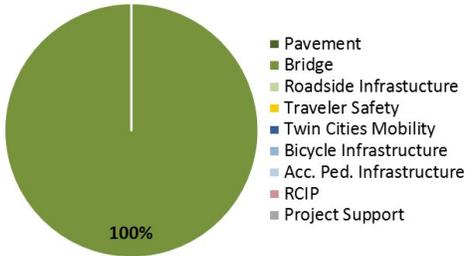
Hwy 13  
 Waseca to Hwy 30 in New Richland  
 Bridge 81001, &, 81002  
 State Project No. 8101-57  
 NA



## Primary Purpose

Performance-based Need: Pavement

## Investment Category



## Project Description

This project is a mill and overlay on Hwy 13 from south of Waseca to Hwy 30 in New Richland, a length of about 11 miles. The project also includes bridge rehabilitation work on bridges and some ADA updates to the county trail on the east side of New Richland.

## Recent Changes and Updates

The project letting was delayed due to funding. Then it was let. Due to staffing shortages, the project will be constructed in 2018.

## Project History

This project combines mill and overlay pavement preservation and bridge rehabilitation. It will also address some ADA concerns on the county trail on the east side of New Richland. The project reached 95% design with no significant changes.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2013

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 4.8	\$ 6.4
Other Construction Elements:	\$ 0.5	\$ 0.6
Engineering:	\$ 1.0	\$ 1.3
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 6.3</b>	<b>\$ 8.3</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

The current estimate for construction is the actual bid.

## Project Risks

There are currently no outstanding risks on this project.

## Schedule

Environmental Approval Date: 06/24/2016  
 Municipal Consent Approval Date: Not Needed  
 Geometric Layout Approval Date: Not Needed  
 Construction Limits Established Date: Not Needed  
 Original Letting Date: 12/16/2016  
 Current Letting Date: 05/19/2017  
 Construction Season: 2018  
 Estimated Substantial Completion: Fall 2018



Minnesota Department of Transportation  
 District 7  
 2151 Bassett Drive  
 (507) 304-6100

**District Engineer:** Greg Ous  
**Project Manager:** Robert Jones

**Revised Date:** 12/15/2016

# PROJECT SUMMARY

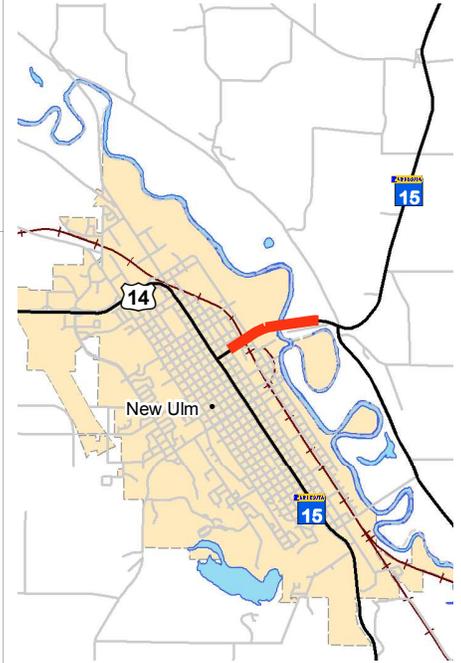
Hwy 14

New Ulm and junction with Hwy 15

Bridge 9200, &, 9294

State Project No. 0804-81

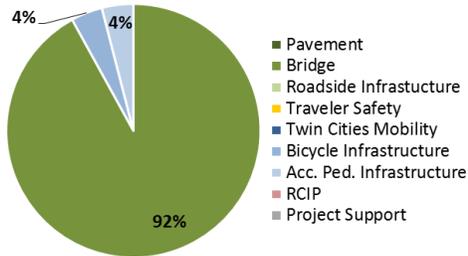
<http://www.dot.state.mn.us/d7/projects/14newulmtonmankato/>



## Primary Purpose

Performance-based Need: Bridge Condition

## Investment Category



## Project Description

This project will construct two-lane bridges over the Minnesota River and Front St., reconstruct the in-town section of Hwy 14 from Front St. to the signal at Broadway St., and construct an interchange at the junction at Hwy 14/Hwy 15/CR 21 east of New Ulm.

## Recent Changes and Updates

Project letting was moved to October 27, 2017 and project has been let, but the construction schedule has not changed.

## Project History

This project was scoped for bridge replacement, but the area was then reviewed for other improvements that should be made while the bridges are out.

A special task force commissioned by the Commissioner of Transportation reviewed priorities in the corridor and discussed how best to apply current funding. The task force issued a recommendation for the inclusion of the Hwy 14/Hwy 15 interchange in the project, while revising the scope of the existing bridges to be 2-lane bridge structures. MnDOT reviewed the recommendation and concurred with the revised scope of work.

The preliminary design and geometric layout for the project were completed in May 2016.

The letting date was moved to September 2017 because the agency believes a better bid will be obtained with a fall letting over an early summer letting.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2014

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 42.7	\$ 31.5
Other Construction Elements:	\$ 7.0	\$ 3.0
Engineering:	\$ 7.0	\$ 4.2
Right of Way:	\$ 0.1	\$ 0.1
<b>Total:</b>	<b>\$ 56.8</b>	<b>\$ 38.8</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

The current estimate is based on actual letting cost.

The poor soils risk were mitigated with surcharging and wick drain installation. Other items were included to reduce project cost including removal of the free right for Hwy 14 EB, removal of retaining wall, limiting grading in areas not required like the south ramps of Front St/Hwy 14.

## Project Risks

A moderate amount of surcharging and wick drainings is included in the cost to mitigate poor soil concerns.

A multi-year detour will be required for this work to be completed.

## Schedule

Environmental Approval Date: Pending Approval  
 Municipal Consent Approval Date: Pending Approval  
 Geometric Layout Approval Date: 5/11/2016  
 Construction Limits Established Date: 5/11/2016  
 Original Letting Date: 5/01/2017  
 Current Letting Date: 10/27/2017  
 Construction Season: 2017-2019  
 Estimated Substantial Completion: December 2019



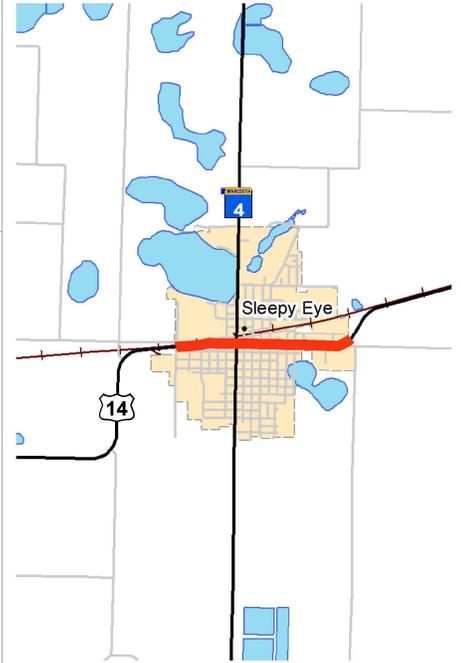
Minnesota Department of Transportation  
 District 7  
 2151 Bassett Drive  
 (507) 304-6100

**District Engineer:** Greg Ous  
**Project Manager:** Zachary Tess

**Revised Date:** 12/15/2016

## PROJECT SUMMARY

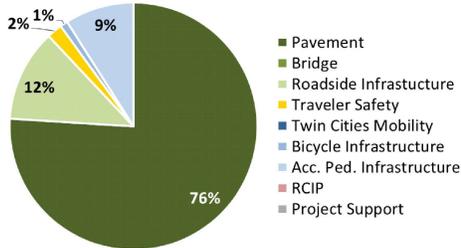
Hwy 14  
Sleepy Eye  
Bridge NA  
State Project No. 0803-38  
NA



### Primary Purpose

Performance-based Need: Pavement

### Investment Category



### Project Description

This project is for pavement work on Hwy 14 in Sleepy Eye, ADA improvements and the addition of turn lanes in Sleepy Eye.

### Recent Changes and Updates

The scope of the project was amended to include turn lanes and additional ADA work in the city of Sleepy Eye. This work will require some additional right of way acquisition.

The rural portion has been dropped from this project and the project now only covers 1.5 miles of in-town work.

### Project History

Originally, this project was the combination of two project scopes into one (SP 0804-114 and SP 0803-38). The project was a pavement and bridge rehabilitation project, which included ADA improvements. However, the bridge work (for bridges #08002 and #08004) was done under another project (SP 0804-114) and was removed from this one. The rural portion has been dropped from this project and is a potential shelf project (under SP 0803-43).

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2014

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 7.1	\$ 2.1
Other Construction Elements:	\$ 0.4	\$ 0.2
Engineering:	\$ 1.5	\$ 0.4
Right of Way:	\$ 0.0	\$ 0.4
<b>Total:</b>	<b>\$ 9.0</b>	<b>\$ 2.7</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

Costs increased in 2014 due the additional length at the east end of the project. The current estimate reflects rural portion being dropped from this project.

### Project Risks

The project risks include the following: additional city utility work within the city limits of Sleepy Eye; additional ADA compliant work, which may include sidewalks; signal removal; left turn lanes, additional right of way purchase of several parcels within Sleepy Eye's city limits and other traffic calming initiatives. Another potential cost would come from adding the original rural portion back to this project.

### Schedule

Environmental Approval Date: Pending Approval  
Municipal Consent Approval Date: Pending Approval  
Geometric Layout Approval Date: Pending Approval  
Construction Limits Established Date: Pending Approval  
Original Letting Date: 1/26/2018  
Current Letting Date: 1/26/2018  
Construction Season: 2018  
Estimated Substantial Completion: Fall 2018



Minnesota Department of Transportation  
District 7  
2151 Bassett Drive  
(507) 304-6100

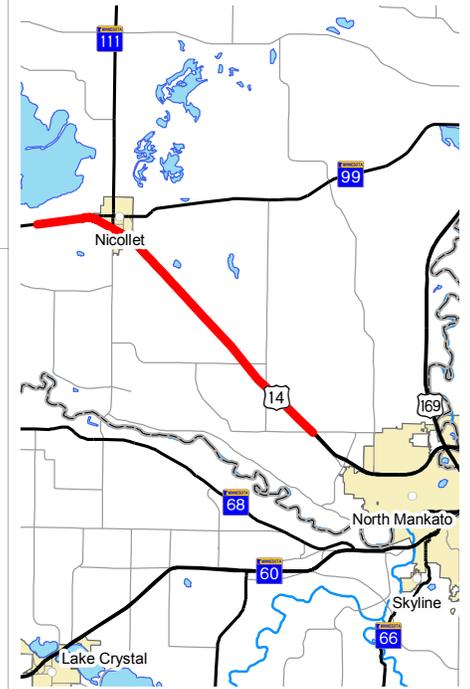
District Engineer: Greg Ous  
Project Manager: Robert Jones

Revised Date: 12/15/2016

# PROJECT SUMMARY

Hwy 14  
 West of Nicollet to North Mankato  
 Bridge 52005  
 State Project No. 5203-104  
<http://www.dot.state.mn.us/d7/projects/14newulmtonmankato/>

**Substantially Complete**



## Primary Purpose

Regional & Community Improvement Priority

## Investment Category



## Project Description

This project expands Hwy 14 from a 2-lane to a 4-lane expressway to improve safety, capacity, and enhance the corridor's interregional trade function. This project goes from west of Nicollet to North Mankato for a distance of over 9 miles. Hwy 14 will bypass Nicollet. The project includes the construction of an interchange with roundabouts at Hwy 14 and Hwy 111.

## Recent Changes and Updates

Project was completed and opened to traffic in 2016.

## Project History

This project was let in May 2015. The current estimate is the actual let amount.

The project was in the final design stage. The public hearing for Municipal Consent from the city of Nicollet was on August 11, 2014. The project cost was updated to reflect a more detailed cost estimate, and many risks were retired. There was also substantially less poor soils than originally anticipated. The project was scoped after its inclusion in the Corridors of Commerce program in November 2013. Coordination with the community of Nicollet occurred in determining the intersection solution at the new Hwy 14 and Hwy 111.

The project is under construction and is expected to be substantially complete by December 2016 with some potential for clean up work in 2017.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2014

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 38.3	\$ 31.7
Other Construction Elements:	\$ 2.3	\$ 2.3
Engineering:	\$ 7.5	\$ 4.8
Right of Way:	\$ 3.4	\$ 2.4
<b>Total:</b>	<b>\$ 51.5</b>	<b>\$ 41.2</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

The project was let in May 2015; the current estimate was updated to reflect awarded contract price.

## Project Risks

Project is complete.

## Schedule

Environmental Approval Date: 9/01/2012  
 Municipal Consent Approval Date: 8/18/2014  
 Geometric Layout Approval Date: 5/19/2014  
 Construction Limits Established Date: 1/15/2014  
 Original Letting Date: 5/15/2015  
 Current Letting Date: 5/22/2015  
 Construction Season: July 2015-December 2016  
 Estimated Substantial Completion: December 2016



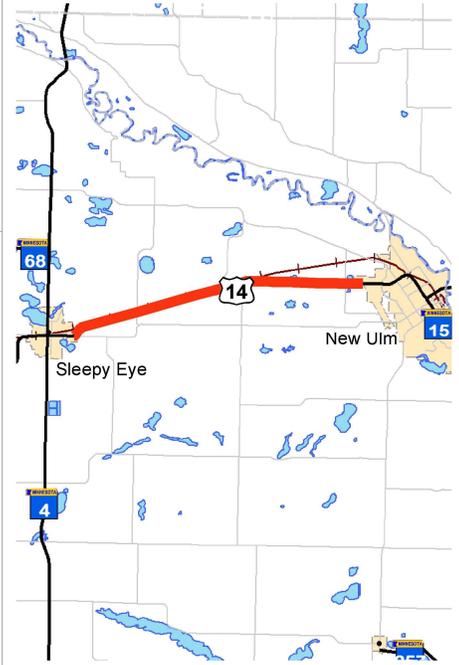
Minnesota Department of Transportation  
 District 7  
 2151 Bassett Drive  
 (507) 304-6100

**District Engineer:** Greg Ous  
**Project Manager:** Zachary Tess

**Revised Date:** 12/15/2016

# PROJECT SUMMARY

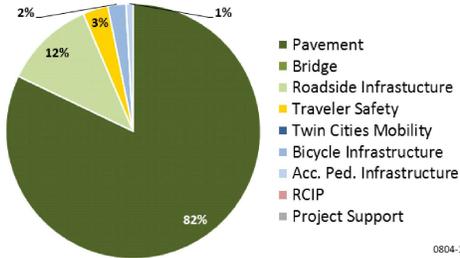
Hwy 14  
 East limits of Sleepy Eye to west limits of New Ulm  
 Bridge NA  
 State Project No. 0804-113  
 NA



## Primary Purpose

Performance-based Need: Pavement

## Investment Category



0804-113

## Project Description

This project is a mill and overlay on Hwy 14 from the east of Hwy 27 in Sleepy Eye to the west side of New Ulm, a length of almost 10 miles.

## Recent Changes and Updates

The scope was amended to shorten the length of the project, which reduced the current cost estimate as well.

The letting date changed to balance the district lettings schedule.

This project was let in the spring of 2017, but not awarded. It was let again in October 2017 and not awarded. The project will be rebid in December 2017. Construction is still planned for 2018.

## Project History

The purpose of this project is to provide a smooth ride by resurfacing the roadway. The project was scoped and a detour should not be necessary. In 2016, the scope was changed to reflect a thin mill and overlay.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2013

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 4.3	\$ 2.3
Other Construction Elements:	\$ 0.4	\$ 0.4
Engineering:	\$ 0.8	\$ 0.5
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 5.5</b>	<b>\$ 3.2</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

The baseline estimate is based on bituminous pavement. The estimate decreased slightly (to \$4.8 million) due to the project limits decreasing. Some contingency included was based on additional pipe replacements and detour needs. This was estimated in 2012 dollars, then inflated to 2017 dollars. For the current estimate, the scope was changed in 2016 to reflect a thin mill and overlay through the entire corridor reducing the overall cost.

## Project Risks

There may be a need to replace a few culverts within the project limits and perform additional hydraulics work. There is a possibility that the project may be changed to a concrete overlay rather than bituminous, which would increase project costs. The project could be changed back to a medium mill and overlay (but this is not likely).

## Schedule

Environmental Approval Date: done  
 Municipal Consent Approval Date: Not Needed  
 Geometric Layout Approval Date: Not Needed  
 Construction Limits Established Date: Not Needed  
 Original Letting Date: 11/18/2016  
 Current Letting Date: 12/15/2017  
 Construction Season: 2018  
 Estimated Substantial Completion: Fall 2018



Minnesota Department of Transportation  
 District 7  
 2151 Bassett Drive  
 (507) 304-6100

District Engineer: Greg Ous  
 Project Manager: Robert Jones

Revised Date: 12/15/2016

## PROJECT SUMMARY

Hwy 14

North Mankato to Mankato

Bridge 91387

State Project No. 0702-125

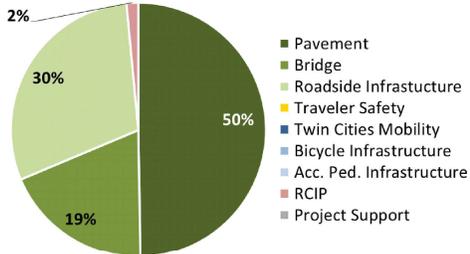
<http://www.dot.state.mn.us/d7/projects/hwy14mankato/index.html>



### Primary Purpose

Perfomanced Based Need: Pavement Condition

### Investment Category



### Project Description

This is a resurfacing project to mill and overlay the existing blacktop pavement from west of Lookout Drive in North Mankato to Hwy 22 in Mankato. Resurfacing will include both westbound and eastbound lanes, Repairs will be made to a large metal culvert at Thompson Creek.

### Recent Changes and Updates

The roadway is deteriorating more rapidly than expected. It required extensive roadway patching during the summer of 2017. The resurfacing was moved one construction season earlier in 2018 rather than 2019.

### Project History

Project scoping was completed and the project was selected for work.

The project is driven by poor and rapidly deteriorating pavement and by corrosion on a bridge (#91387).

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2016

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 7.1	\$ 9.1
Other Construction Elements:	\$ 0.6	\$ 0.7
Engineering:	\$ 1.3	\$ 1.9
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 9.0</b>	<b>\$ 11.7</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

Costs are inflated to the 2018 mid-point of construction.

### Project Risks

The roadway section has the highest volume of traffic in District 7 with significant peak morning and afternoon traffic volumes, which can impact project costs due to performing the work without a detour or road closure. The costs for the large culvert rehabilitation are not easily estimated due to the bridge configuration, culvert depth, and type of specialized repair needed. Costs were not included for the roadway bridge end post work because a more extensive bridge project is planned for the future.

### Schedule

Environmental Approval Date: Pending  
 Municipal Consent Approval Date: Not Needed  
 Geometric Layout Approval Date: Not Needed  
 Construction Limits Established Date: 4/28/2017  
 Original Letting Date: 3/19/2019  
 Current Letting Date: 3/23/2018  
 Construction Season: Summer 2018  
 Estimated Substantial Completion: Fall 2018



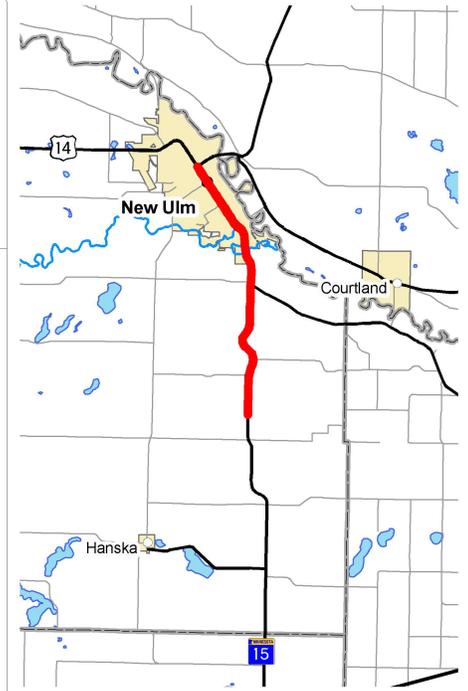
Minnesota Department of Transportation  
 District 7  
 2151 Bassett Drive  
 (507) 304-6100

District Engineer: Greg Ous  
 Project Manager: Glen Coudron

Revised Date: 12/15/2016

# PROJECT SUMMARY

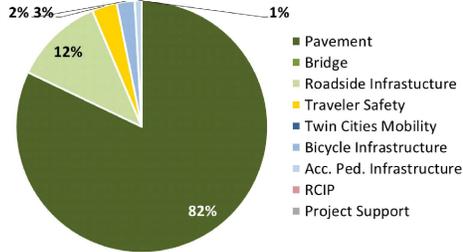
Hwy 15  
 South of Searles to New Ulm  
 Bridge 08010, 08011  
 State Project No. 0805-113  
 NA



## Primary Purpose

Performance-based Need: Pavement

## Investment Category



## Project Description

This project is a mill and overlay on Hwy 15 from Township Road 46 on the south side of Searles to the junction of Hwy 14 and Hwy 15 in New Ulm, for a distance of 8.5 miles. This project also improves sidewalks and curb ramps in New Ulm to bring them to ADA standards. Three signal systems will also be replaced.

## Recent Changes and Updates

The project was let and construction was completed.

## Project History

This project will provide a smooth riding surface and reconstruct the failing sidewalk and pedestrian ramps in New Ulm to meet ADA guidelines. The project was scoped and a minimal amount of risks were identified. The project scope was modified to bring the sidewalk up to current ADA standards in addition to the pedestrian ramps. The letting was changed to align with a scheduled letting date after the project was selected. The project scope was modified to include three traffic signal upgrades due to age of the current structures. A continuous two way left turn lane was added on the south end of New Ulm to accommodate left turners and to make this section of road safer.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2013

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 7.2	\$ 7.1
Other Construction Elements:	\$ 0.6	\$ 0.1
Engineering:	\$ 1.3	\$ 0.4
Right of Way:	\$ 0.0	\$ 0.4
<b>Total:</b>	<b>\$ 9.1</b>	<b>\$ 8.0</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

The project was let on February 24, 2017 for \$7,067,108.29; this accounts for around \$600,00 in bid savings.

## Project Risks

Detours will be needed for bridge repairs in the rural section of the project and the spot pavement replacements in the urban area. Easements will be needed in some areas where there is sidewalk replacement in New Ulm. Tree removals will need to be done prior to June 1, for environmental reasons.

## Schedule

Environmental Approval Date: 11/16/2016  
 Municipal Consent Approval Date: Not Needed  
 Geometric Layout Approval Date: Not Needed  
 Construction Limits Established Date: 7/27/2015  
 Original Letting Date: 1/01/2017  
 Current Letting Date: 2/24/2017  
 Construction Season: 2017  
 Estimated Substantial Completion: Fall 2017



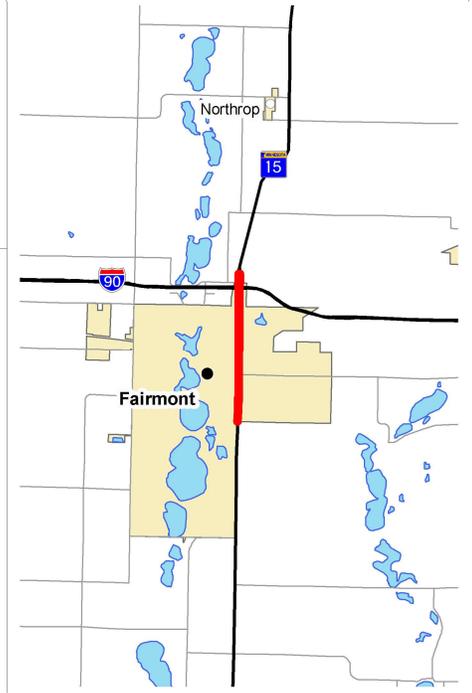
Minnesota Department of Transportation  
 District 7  
 2151 Bassett Drive  
 (507) 304-6100

District Engineer: Greg Ous  
 Project Manager: Forrest Hasty

Revised Date: 12/15/2016

# PROJECT SUMMARY

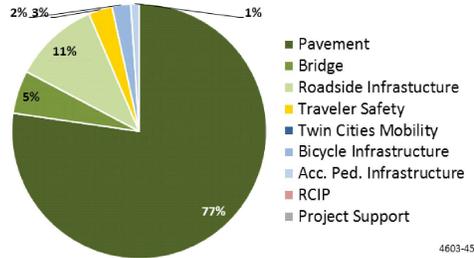
Hwy 15  
Fairmont  
Bridge NA  
State Project No. 4603-45  
<http://www.dot.state.mn.us/d7/projects/hwy15fairmont/>



## Primary Purpose

Performance-based Need: Pavement

## Investment Category



## Project Description

This section of Hwy 15 includes the urban section of roadway in Fairmont, from the south end of the project at Johnson Street to the north end at Goemann Road. The roadway work will consist of a mill and overlay. Updates to signals and pedestrian ramps to meet ADA requirements will also be completed, along with performing spot repairs of the existing storm sewer system and underground utilities.

## Recent Changes and Updates

The original project letting date of January 2017 was delayed until April 2017 due to MnDOT not receiving legislative funding approval for the additional FAST Act federal funds. The project was let on April 28, 2017 and construction started on the project in July of 2017. Construction progressed to be substantially complete late fall 2017.

## Project History

Traffic signals at four of the seven signalized intersections within the project limits will be replaced. This is due to age and repair costs associated with ADA and flashing yellow arrow upgrades. Spot repairs to the storm sewer system and city underground utilities were identified for inclusion under the project. Where feasible, the city is repairing its utilities in advance. There is project coordination with the city of Fairmont to review sidewalks and intersection control. The prelim. design work and final design began in 2015. Additional scoping yet to be completed includes the city's utilities needs and the life cycle cost analysis. Rehab. of the bridge over Center Creek was re-evaluated and this work is no longer planned as part of this project.

## Schedule

Environmental Approval Date: 07/01/2016  
Municipal Consent Approval Date: Not Needed  
Geometric Layout Approval Date: Not Needed  
Construction Limits Established Date: 1/27/2016  
Original Letting Date: 1/01/2017  
Current Letting Date: 1/27/2017  
Construction Season: 2017  
Estimated Substantial Completion: Fall 2017

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2013

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 6.1	\$ 4.9
Other Construction Elements:	\$ 0.6	\$ 0.6
Engineering:	\$ 1.1	\$ 1.1
Right of Way:	\$ 0.1	\$ 0.1
<b>Total:</b>	<b>\$ 7.9</b>	<b>\$ 6.7</b>

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

## Key Cost Estimate Assumptions

The amount listed for the construction letting under the column for the current estimate is the letting cost of the low bid received in the amount of \$4.88 million.

The project includes a mill and overlay without the need to fully close the roadway to traffic. Short term detours using the City of Fairmont street systems needed to perform spot repairs of the underground utilities. The construction letting cost under the current estimate column is less than the baseline estimate due to estimated savings in the pavement mill and overlay.

## Project Risks

There are two railroad companies with crossings to Highway 15. The timelines of when the railroads will make their crossing repairs could impact the construction staging and impact traffic to businesses. One railroad replaced their crossing in the fall of 2016, and the other railroad was not able to schedule the crossing replacement ahead of the project.

If after milling the top surface of the pavement the condition of the underlying pavement is found to be in worse condition than expected, there could be additional



Minnesota Department of Transportation  
District 7  
2151 Bassett Drive  
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District Engineer: Greg Ous  
Project Manager: Glen Coudron

Revised Date: 12/15/2016

## PROJECT SUMMARY

Hwy 19

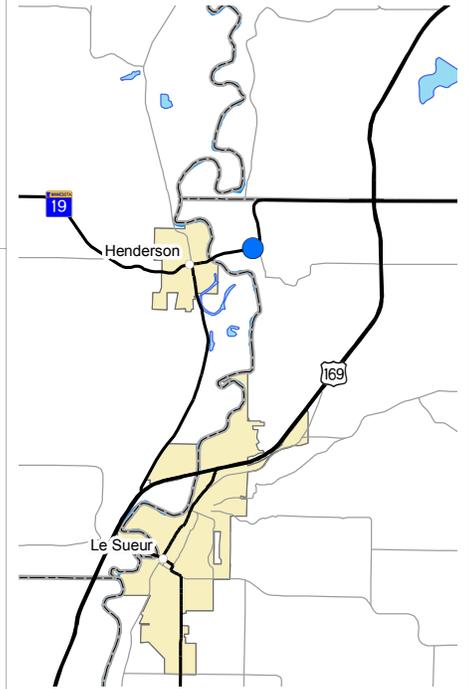
Over the Union Pacific railroad, east of Sibley/LeSueur county line

Bridge 5369

State Project No. 4004-112

<http://www.dot.state.mn.us/d7/projects/hwy19henderson/index.html>

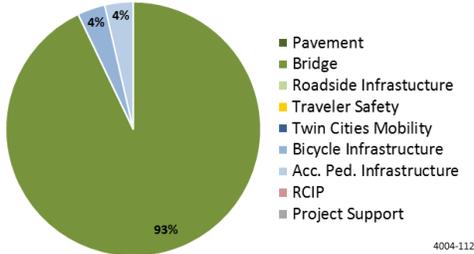
Substantially Complete



### Primary Purpose

Performance-based Need: Bridge Condition

### Investment Category



### Project Description

This project will replace a bridge over Union Pacific Railroad track east of Henderson. The project includes associated grading and paving on the ends of the bridge.

### Recent Changes and Updates

The letting date was pushed back because the railroad was not timely in approving the agreement.

This project was completed and opened to traffic in fall 2016.

### Project History

The existing bridge is failing. The sight distance is poor at the county road intersection. The project will replace the bridge with a structure that minimizes maintenance and provides improved sight distance for the local road connection.

Railroad requirements necessitate a longer and taller bridge than the current one. Constructing the larger embankments required for this bridge led to significant geotechnical issues and wetland, floodplain and wildlife refuge impacts.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2011

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 3.0	\$ 5.2
Other Construction Elements:	\$ 0.5	\$ 0.4
Engineering:	\$ 0.6	\$ 1.5
Right of Way:	\$ 0.1	\$ 0.0
<b>Total:</b>	<b>\$ 4.2</b>	<b>\$ 7.1</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

The project was let; the current estimate costs reflect the awarded contract price.

In early 2014, a switch was made to the project to use a reinforced-soil slope embankment, which allows steeper slopes and in turn has a smaller construction footprint. This change eliminated permanent wetland, floodplain and wildlife refuge impacts on the project and reduced construction costs by \$1.7 million.

### Project Risks

Railroad coordination may pose a schedule risk in design and construction.

### Schedule

Environmental Approval Date: 12/11/2015  
 Municipal Consent Approval Date: Not Needed  
 Geometric Layout Approval Date: 7/08/2014  
 Construction Limits Established Date: 6/18/2014  
 Original Letting Date: 2/28/2014  
 Current Letting Date: 3/18/2016  
 Construction Season: 2016  
 Estimated Substantial Completion: Nov. 2016



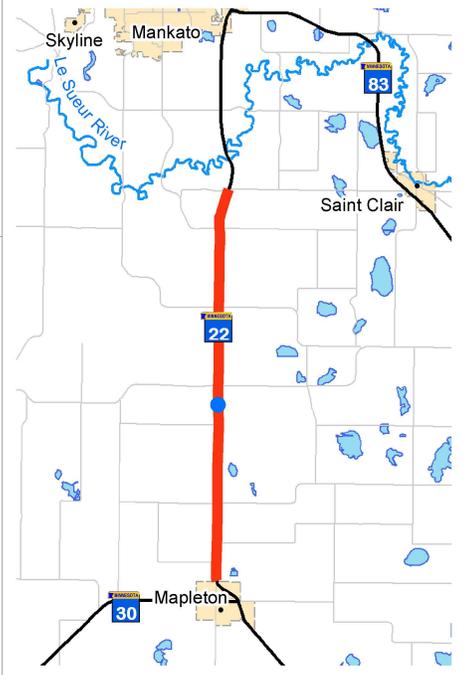
Minnesota Department of Transportation  
 District 7  
 2151 Bassett Drive  
 (507) 304-6100

**District Engineer:** Greg Ous  
**Project Manager:** Dan Franta

**Revised Date:** 12/15/2016

# PROJECT SUMMARY

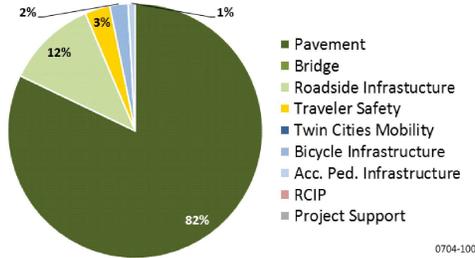
Hwy 22  
 Hwy 7 to Hwy 15  
 Bridge 5959  
 State Project No. 0704-100  
<http://www.dot.state.mn.us/d7/projects/hwy22mapleton/index.html>



## Primary Purpose

Performance-based Need: Pavement

## Investment Category



## Project Description

This project consists of reconstructing 10.5 miles of pavement from Mapleton near CR 7 to CR 15, including the replacement of a bridge over the Big Cobb River. In addition, turn lanes will be constructed at several county roadways.

## Recent Changes and Updates

The project was let this year. Construction of the south half is underway. The highway is open to traffic north of County Highway 10. There were rain delays but the Mapleton to County Highway 10 should be open this fall.

Since last year the decision was made to add a left turn lane at County Highway 15. Construction on that will take place in spring and summer 2018 along with the rest of the northern segment.

## Project History

The bridge over the Big Cobb River is scheduled to be replaced.

The condition of the pavement was investigated in 2014 and found to be too deteriorated, and therefore unsuited for an unbonded overlay. The project scope was amended to include pavement reconstruction. Project limits were adjusted and the north limit was scaled back to the intersection of Hwy 15. The section of Hwy 22, from Hwy 15 to Hwy 90, which includes bridge over the Le Sueur River, will not be included under this project. The letting date was changed to accommodate the bridge offices work load issues.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2013

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 25.9	\$ 16.5
Other Construction Elements:	\$ 2.9	\$ 2.9
Engineering:	\$ 4.6	\$ 4.6
Right of Way:	\$ 0.1	\$ 0.1
<b>Total:</b>	<b>\$ 33.5</b>	<b>\$ 24.1</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

The project was let so the current construction letting is the actual let amount.

## Project Risks

The project will need to be constructed over two years.

## Schedule

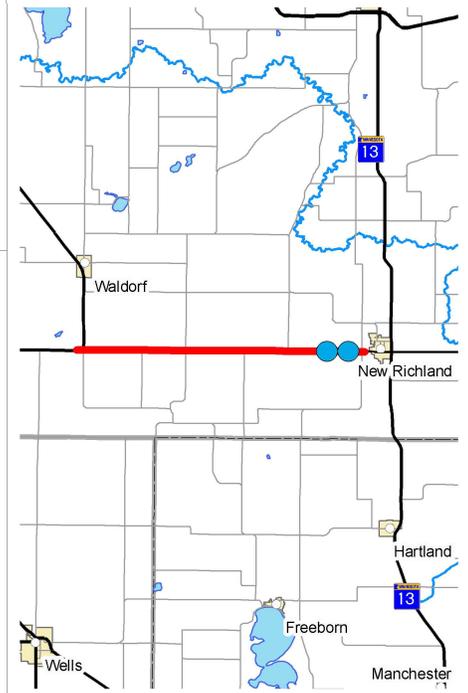
Environmental Approval Date: 8/26/2016  
 Municipal Consent Approval Date: Not Needed  
 Geometric Layout Approval Date: 1/26/2016  
 Construction Limits Established Date: 6/04/2015  
 Original Letting Date: 1/01/2017  
 Current Letting Date: 1/27/2017  
 Construction Season: 2017 - 2018  
 Estimated Substantial Completion: Fall 2018



Minnesota Department of Transportation  
 District 7  
 2151 Bassett Drive  
 (507) 304-6100  
 District Engineer: Greg Ous  
 Project Manager: Peter Harff  
 Revised Date: 12/15/2016

## PROJECT SUMMARY

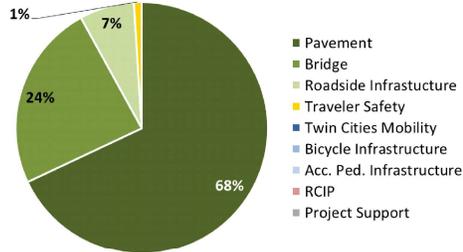
Hwy 30  
From Hwy 83 to New Richland  
Bridge 6789, &, 8131  
State Project No. 8105-21  
NA



### Primary Purpose

Performance-based Need: Pavement Condition and Bridge Condition

### Investment Category



### Project Description

This is a rural preservation project consisting of a mill and overlay of about 10 miles of Hwy 30. In addition, two bridges will be replaced.

### Recent Changes and Updates

Project moved to 2020 for budgetary reasons.

### Project History

Bridge #6789 is scour critical and bridge #8131 is old. Both bridges are in need of replacement.

The bridges (#6789 and #8131) will be replaced and extended with right of way acquisition. The project letting date and the construction year moved to 2020 for district budget needs.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2015

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 5.7	\$ 5.9
Other Construction Elements:	\$ 0.4	\$ 0.4
Engineering:	\$ 1.0	\$ 1.0
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 7.1</b>	<b>\$ 7.3</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

The cost was determined assuming a medium mill and overlay, two bridge replacements, right of way acquisition and culvert linings. Changing the construction year from 2019 to 2020 inflation raised the current estimate slightly.

### Project Risks

The risks are the possibility of additional bridge rehabs, lengthening of culverts, right of way acquisition, scope or grade changes and possible detour needed.

### Schedule

Environmental Approval Date: Pending Approval  
Municipal Consent Approval Date: Not Needed  
Geometric Layout Approval Date: Not Needed  
Construction Limits Established Date: Pending Approval  
Original Letting Date: 10/26/2018  
Current Letting Date: 10/25/2019  
Construction Season: 2020  
Estimated Substantial Completion: Nov 2020



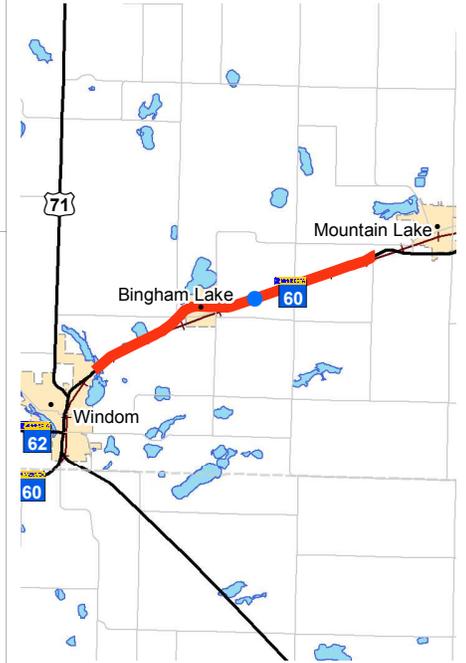
Minnesota Department of Transportation  
District 7  
2151 Bassett Drive  
(507) 304-6100

District Engineer: Greg Ous  
Project Manager: Robert Jones

Revised Date: 12/15/2016

## PROJECT SUMMARY

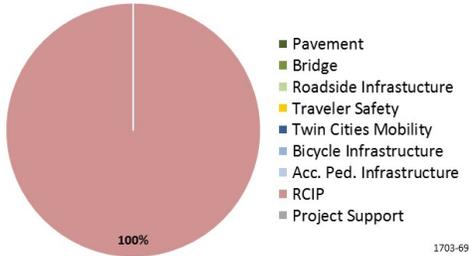
Hwy 60  
 Windom to west of Mountain Lake  
 Bridge 8260  
 State Project No. 1703-69  
<http://www.dot.state.mn.us/d7/projects/hwy60stjames/index.html>



### Primary Purpose

Regional & Community Improvement Priority

### Investment Category



### Project Description

This project completes Hwy 60 as a four-lane divided roadway between the eastern edge of Windom and the west end of the existing four-lane section near Mountain Lake. It includes construction through Bingham Lake.

### Recent Changes and Updates

Project was let and is nearing completion of first of two years of construction. No major issues were found during construction.

### Project History

The project received municipal consent on the layout from the city of Bingham Lake. The consultant that will do the final design was procured. The cost estimate was lowered because contingencies for poor soils and retaining walls were reduced.

The Final Scoping Report was completed in 2013. The development of the formal geometric layout is underway.

The work proposed under this project was originally addressed in an Environmental Impact Statement approved in 1983. Initial phases of the work identified in the 1983 EIS were completed. A supplemental final EIS was completed in 2012.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2013

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 27.1	\$ 19.7
Other Construction Elements:	\$ 3.0	\$ 2.3
Engineering:	\$ 4.9	\$ 4.6
Right of Way:	\$ 1.5	\$ 2.1
<b>Total:</b>	<b>\$ 36.5</b>	<b>\$ 35.8</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

Standard practices were used to develop the cost estimates for this project, as well as a contractor style estimate, and also a risk-based monte carlo style estimate.

Actual Bid amount is 19.7 million and reflects good bid savings.

### Project Risks

All major project design risks were retired.

### Schedule

Environmental Approval Date: 11/23/2012  
 Municipal Consent Approval Date: 05/04/2015  
 Geometric Layout Approval Date: 7/27/2015  
 Construction Limits Established Date: 4/22/2015  
 Original Letting Date: 2/24/2017  
 Current Letting Date: 2/08/2017  
 Construction Season: 2017 - 2018  
 Estimated Substantial Completion: Fall 2018



Minnesota Department of Transportation  
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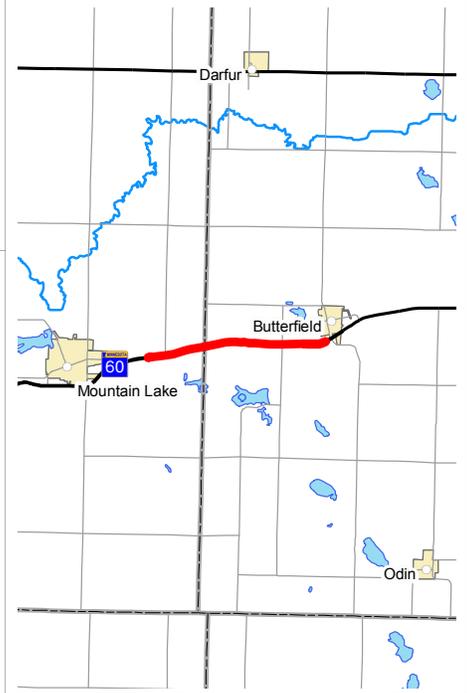
**District Engineer:** Greg Ous  
**Project Manager:** Peter Harff

**Revised Date:** 12/15/2016

# PROJECT SUMMARY

Hwy 60  
 Mountain Lake to Butterfield  
 Bridge NA  
 State Project No. 1703-70  
<http://www.dot.state.mn.us/d7/projects/hwy60stjames/index.html>

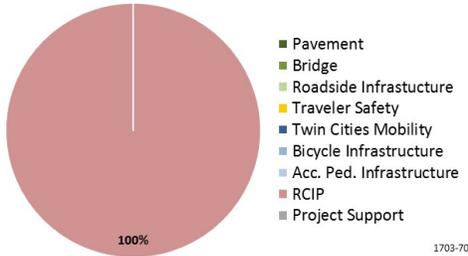
**Substantially Complete**



## Primary Purpose

Regional & Community Improvement Priority

## Investment Category



## Project Description

This 4.5 mile project constructed a four-lane expressway along the existing alignment from Mountain Lake to Butterfield, by constructing two additional lanes, reducing access locations and reconstructing existing shoulders.

## Recent Changes and Updates

The project was constructed in 2015 and fully open to traffic in late fall of 2015.

## Project History

The project construction is substantially complete. The project design was completed in 2014 and the project was bid in the fall of 2014.

The existing roadway, which served as the westbound lanes, required some concrete pavement rehabilitation and joint repair. This repair was done while the roadway was detoured for the construction of the new eastbound lanes.

The work proposed under this project was originally addressed in an environmental impact statement approved in 1983. The initial phases of the work identified in the 1983 EIS are completed.

As part of balancing project lettings, this project was let earlier than originally anticipated.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2011

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 13.8	\$ 11.2
Other Construction Elements:	\$ 2.1	\$ 2.1
Engineering:	\$ 2.8	\$ 2.8
Right of Way:	\$ 0.6	\$ 0.6
<b>Total:</b>	<b>\$ 19.3</b>	<b>\$ 16.7</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

The construction letting amount shown in the column for the current estimate is based on the low bid received for bituminous pavement. There was an overall project cost savings realized on the project after having received competitive bids on the project.

## Project Risks

Soil testing was completed. Substantial muck excavation may be encountered that would require correction and may elevate project costs. The project is being bid with different alternates for bituminous and concrete pavement surfacing.

## Schedule

Environmental Approval Date: 2013  
 Municipal Consent Approval Date: Not Needed  
 Geometric Layout Approval Date: 8/14/2012  
 Construction Limits Established Date: 3/15/2013  
 Original Letting Date: 12/19/2014  
 Current Letting Date: 11/21/2014  
 Construction Season: 2015  
 Estimated Substantial Completion: Late fall 2015



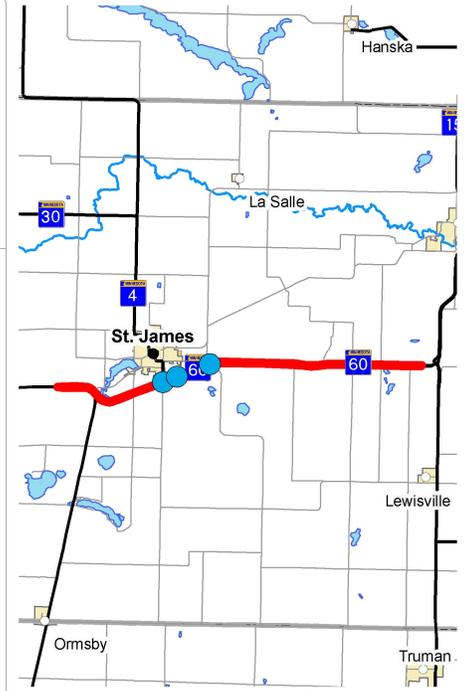
Minnesota Department of Transportation  
 District 7  
 2151 Bassett Drive  
 (507) 304-6100

**District Engineer:** Greg Ous  
**Project Manager:** Glen Coudron

**Revised Date:** 12/15/2016

# PROJECT SUMMARY

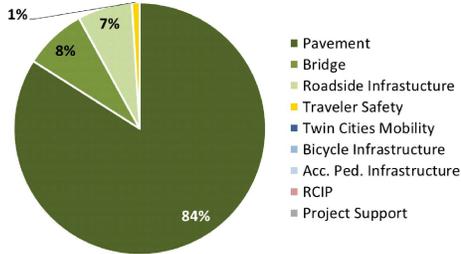
Hwy 60  
 Between St. James and Hwy 4 to Hwy 14  
 Bridge 83026, 91543, 83027  
 State Project No. 8309-52  
 NA



## Primary Purpose

Performance-based Need: Pavement

## Investment Category



## Project Description

The project will preserve about 13 miles of both the eastbound and westbound lanes of Hwy 60 from St. James and Hwy 4 to Hwy 14. The project includes the following: concrete overlay, deck repairs and a mill and overlay to a bridge (#83026) and (#83027), pour new invert and paint tripple culvert (#91543). Concrete pavement rehab on Hwy 4 and Co. Rd. 12.

## Recent Changes and Updates

17NEW funds provide for upscoping of this project to an Unbonded Concrete Overlay to be constructed in 2018 and 2019.

Pipe repair work is expected to be completed ahead of time (under SP 8827-271) in the 2017 construction season.

## Project History

The project will resurface the pavement to provide an improved ride quality index rating, a smooth riding surface, and to preserve pavement life. The pavement is in poor condition and will be at the end of its service life by 2019. The scope of the project includes preservation work on the interchange ramps and bridge rehabilitation work in St. James.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2016

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 12.4	\$ 30.5
Other Construction Elements:	\$ 1.2	\$ 2.5
Engineering:	\$ 2.4	\$ 6.2
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 16.0</b>	<b>\$ 39.2</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

The baseline estimate of cost was created using an itemized cost for each section of repair with average bid prices for projects in the area. The estimate was inflated to a construction year of 2019. Project construction cost under the current estimate is \$1.5 million higher due to the inclusion of interchange ramp and bridge rehabilitation work in St. James.

Scope and timeframe was changed significantly due to 17NEW funding. Project was upscoped to a long term fix. From concrete pavement rehabilitation to unbonded concrete overlay.

## Project Risks

There is a potential for Alkali-Silica Reactivity in the existing concrete, which leads to abnormal expansion and cracking of the pavement. This could cause the project to be a bad candidate for pavement preservation work and would then need to be 'rescoped' for a different solution.

## Schedule

Environmental Approval Date: Pending Approval  
 Municipal Consent Approval Date: Not Needed  
 Geometric Layout Approval Date: Not Needed  
 Construction Limits Established Date: Pending Approval  
 Original Letting Date: 10/26/2018  
 Current Letting Date: 10/26/2018  
 Construction Season: 2019  
 Estimated Substantial Completion: November 2019



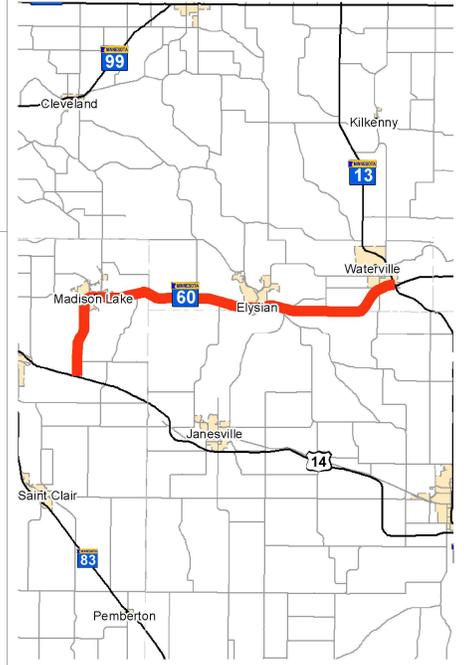
Minnesota Department of Transportation  
 District 7  
 2151 Bassett Drive  
 (507) 304-6100

District Engineer: Greg Ous  
 Project Manager: Matthew Young

Revised Date: 12/15/2016

# PROJECT SUMMARY

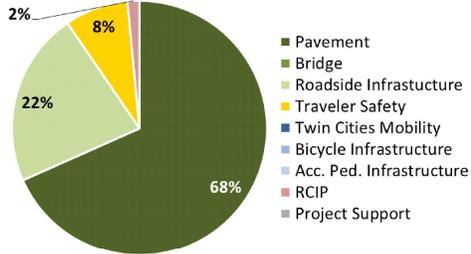
Hwy 60  
 Hwy 14 to Hwy 13 in Waterville  
 Bridge NA  
 State Project No. 4006-35  
<http://www.dot.state.mn.us/d7/projects/hwy60madisonlake/index.html>



## Primary Purpose

Performance Based Need: Pavement Condition

## Investment Category



## Project Description

This projects involves resurfacing on Hwy 60, from the Intersection of Hwy 14 east of Eagle Lake to Hwy 13 in Waterville, for a distance of 16.3 miles. This project also improves sidewalks and curb ramps in Madison Lake to bring them up to ADA standards. The current cross-section may also change in Madison Lake. Several county intersections will receive lighting. The project also consists of installing several turn lanes.

## Recent Changes and Updates

This project is currently being up-scoped to become a reclaim rather than a mill & overlay. This is a better fix and will last longer. It will also include resurfacing in Madison Lake. A bridge has also been identified for removal due to not being needed any longer. It was over an old rail road which is no longer in use.

## Project History

The project was originally scoped as a mill and overlay and excluded work in Madison Lake as the former city staff had stated that they needed to do utility work.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2016

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 11.0	\$ 15.6
Other Construction Elements:	\$ 0.9	\$ 1.3
Engineering:	\$ 2.0	\$ 2.8
Right of Way:	\$ 0.0	\$ 0.1
<b>Total:</b>	<b>\$ 13.9</b>	<b>\$ 19.8</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

The cost estimate is based on a reclaim inflated to 2020.

## Project Risks

The road has held up surprisingly well since the last thin overlay. It could deteriorate rapidly, requiring more extensive fix. It has not been decided if this will be a mill and overlay or a more extensive reclamation repair. The reclamation would raise costs and increase the risk of construction challenges due to poor underlying soils, but would increase the life of the pavement. Inclusion of turn lanes and other safety improvements have not been resolved. There is the possibility that work in Madison Lake may be added.

## Schedule

Environmental Approval Date: Pending  
 Municipal Consent Approval Date: Not Needed  
 Geometric Layout Approval Date: Not Needed  
 Construction Limits Established Date: Pending  
 Original Letting Date: 12/20/2019  
 Current Letting Date: 12/20/2019  
 Construction Season: 2020  
 Estimated Substantial Completion: 2020



Minnesota Department of Transportation  
 District 7  
 2151 Bassett Drive  
 (507) 304-6100

District Engineer: Greg Ous  
 Project Manager: Forrest Hasty

Revised Date: 12/15/2016

# PROJECT SUMMARY

Hwy 71

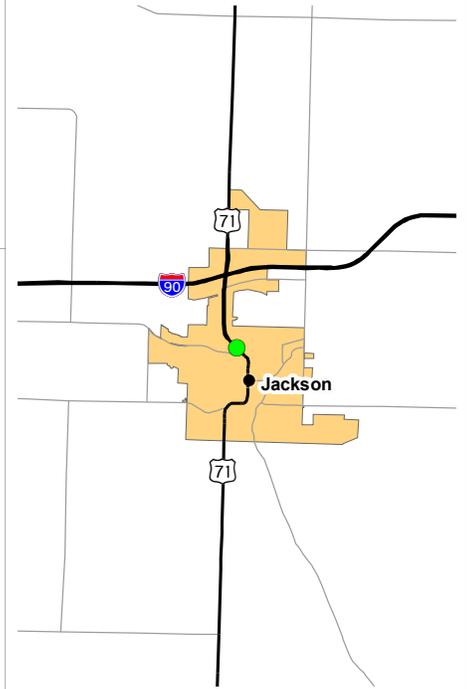
Over the Des Moines River in Jackson

Bridge 6741, (old), 32011, (new)

State Project No. 3205-29

<http://www.dot.state.mn.us/roadwork/future>

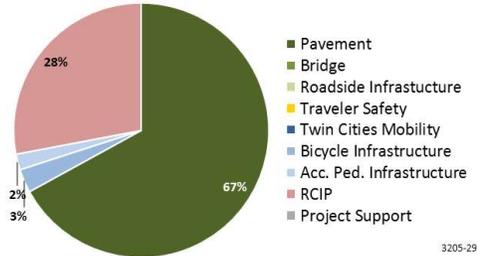
**Substantially Complete**



## Primary Purpose

Performance-based Need: Bridge Condition

## Investment Category



3205-29

## Project Description

This project will replace a bridge over the Des Moines River, from Springfield Parkway to Industrial Boulevard in Jackson. It will also resurface the roadway on a hill with modified lane configuration, and add a trail with a pedestrian crossing indicator.

## Recent Changes and Updates

After updating the 2004 layout that narrowed the width of the bridge, the planning cost estimate decreased, and a new baseline cost estimate was established. Some safety improvements that will be included are turn lanes, truck lanes, etc., and are in partnership with the city and county.

## Project History

The project replaces an aging bridge. Plans were substantially complete in 2004, but the project was delayed due to reprioritizing needs vs. funding.

Construction was completed fall 2016.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2011

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 5.0	\$ 5.0
Other Construction Elements:	\$ 1.0	\$ 1.0
Engineering:	\$ 1.0	\$ 1.0
Right of Way:	\$ 0.1	\$ 0.1
<b>Total:</b>	<b>\$ 7.1</b>	<b>\$ 7.1</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

The current estimate for construction letting is based on the awarded contract price.

## Project Risks

The project is adjacent to a delisted Superfund site.

## Schedule

Environmental Approval Date: 2/2015  
 Municipal Consent Approval Date: Not Needed  
 Geometric Layout Approval Date: 5/2014  
 Construction Limits Established Date: 3/01/2013  
 Original Letting Date: 11/15/2004  
 Current Letting Date: 5/15/2015  
 Construction Season: 2015-2016  
 Estimated Substantial Completion: Fall 2016



Minnesota Department of Transportation  
 District 7  
 2151 Bassett Drive  
 (507) 304-6100

**District Engineer:** Greg Ous  
**Project Manager:** Robert Williams

**Revised Date:** 12/15/2016

# PROJECT SUMMARY

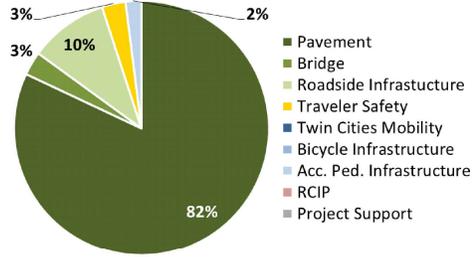
Hwy 71  
 Jackson to Windom  
 Bridge 8325  
 State Project No. 3206-20  
 NA



## Primary Purpose

Performance Based Need: Pavement Condition

## Investment Category



## Project Description

This project is on Hwy 71 from CSAH 38 in Jackson to Hwy 60 in Windom, for a total of 17.8 miles. It includes replacement of a bridge and involves work with the city of Jackson on an addition to their bike trail system.

## Recent Changes and Updates

Surveys were obtained.

## Project History

The project will resurface the roadway to provide a smooth ride and extend the life of the road, using newer technique. It will also replace a bridge (#8325).

Scoping was completed in 2016.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2016

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 9.5	\$ 9.5
Other Construction Elements:	\$ 0.8	\$ 0.8
Engineering:	\$ 1.7	\$ 1.7
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 12.0</b>	<b>\$ 12.0</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

The baseline estimate uses cost calculations for cold in place recycling form of resurfacing, along with bridge replacement and culvert removals and repairs, and additions to the bike trail system in Jackson.

## Project Risks

A change in costs could result from changing the project scope on type of resurfacing ('downscoping' from a cold in place recycling to a medium mill and overlay).

## Schedule

Environmental Approval Date: Pending  
 Municipal Consent Approval Date: Not needed  
 Geometric Layout Approval Date: Not needed  
 Construction Limits Established Date: Pending  
 Original Letting Date: 1/31/2020  
 Current Letting Date: 1/31/2020  
 Construction Season: 2020  
 Estimated Substantial Completion: 2020



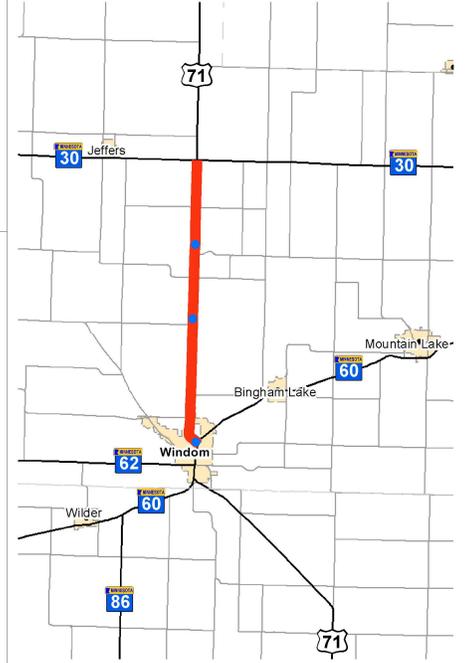
Minnesota Department of Transportation  
 District 7  
 2151 Bassett Drive  
 (507) 304-6100

District Engineer: Greg Ous  
 Project Manager: Robert Jones

Revised Date: 12/15/2016

# PROJECT SUMMARY

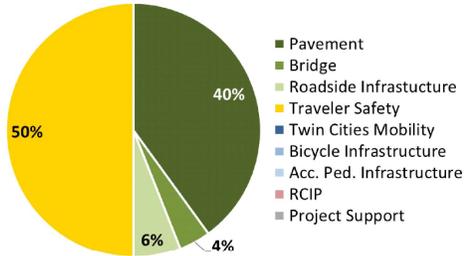
Hwy 71  
 Windom to Hwy 30  
 Bridge 8701, 8328, 5633  
 State Project No. 1706-29  
 NA



## Primary Purpose

Performance Based Need: Pavement Condition

## Investment Category



## Project Description

This project is a micro mill and overlay from the north junction of Hwy 60 in Windom to Hwy 30. In addition, three bridges (8701, 8328 and 5633) will be rehabilitated.

## Recent Changes and Updates

This project is a micro mill and micro-surface and the current TPCE is at \$3.95 million.

\*This project was upscoped to a mill and overlay and will go out to consultant for design

## Project History

The project was scoped in 2015.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2016

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 3.1	\$ 4.0
Other Construction Elements:	\$ 0.3	\$ 0.3
Engineering:	\$ 0.6	\$ 0.8
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 4.0</b>	<b>\$ 5.1</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

The cost estimate is based on staying within the existing right of way, milling and overlaying the roadway and shoulders, and rehabbing three bridges (which are culverts). Project estimate now reflects upscoped to a medium mill and overlay and inflated to 2020 dollars.

## Project Risks

There is potential that additional culverts or bridges may need rehabilitation. Additional right of way may be necessary for work on some of the culverts. The city has expressed an interest in realigning an intersection. The county has expressed an interest in some additional turn lanes.

## Schedule

Environmental Approval Date: Pending  
 Municipal Consent Approval Date: Not Needed  
 Geometric Layout Approval Date: Not Needed  
 Construction Limits Established Date: Not Needed  
 Original Letting Date: 1/31/2020  
 Current Letting Date: 1/31/2020  
 Construction Season: 2020  
 Estimated Substantial Completion: 2020



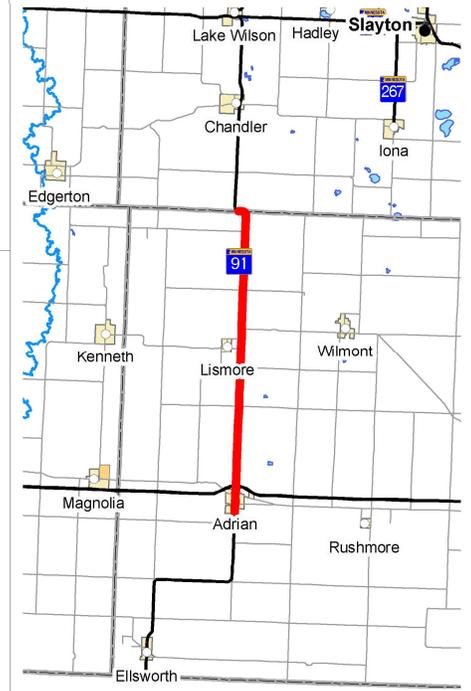
Minnesota Department of Transportation  
 District 7  
 2151 Bassett Drive  
 (507) 304-6100

District Engineer: Greg Ous  
 Project Manager: Robert Jones

Revised Date: 12/15/2016

# PROJECT SUMMARY

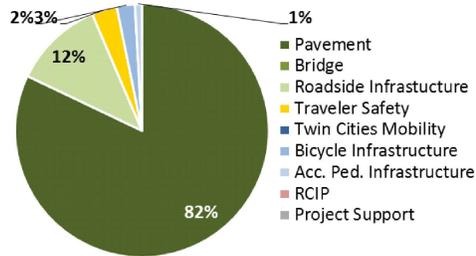
Hwy 91  
 Adrian to Nobles/Murray county line  
 Bridge 1503, &, 8793  
 State Project No. 5308-29  
 NA



## Primary Purpose

Performance-based Need: Pavement Condition

## Investment Category



## Project Description

This project is a 15-mile bituminous mill and overlay of Hwy 91 From the southern Adrian city limits to the Nobles/Murray county line. This does not include a concrete pavement rehabilitation in downtown Adrian. The project includes the replacement of two box culverts/bridges.

## Recent Changes and Updates

The project was moved to FY 2020 to free up funding for other projects in FY 2018. The replacement of two bridges (#1503 and #8793) were added to the scope. The scope was also revised to include sidewalks that are not ADA compliant.

## Project History

The project was identified for inclusion in the 2018 program and scoped.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2014

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 6.9	\$ 7.3
Other Construction Elements:	\$ 4.7	\$ 0.6
Engineering:	\$ 1.3	\$ 1.4
Right of Way:	\$ 0.0	\$ 0.1
<b>Total:</b>	<b>\$ 8.7</b>	<b>\$ 9.4</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

The baseline estimate assumes a medium mill and overlay, extensive ADA work, and the replacement of two box culverts. There is no work at other box culverts.

The current estimate of cost changed to account for an additional year of inflation, added bridges and additional ADA work.

## Project Risks

This project is a candidate for changing to a concrete overlay or bituminous reclaim. There are possible poor soils which could be encountered at the culvert replacement locations. There is the potential for adding additional work during the ADA fixes.

## Schedule

Environmental Approval Date: Pending Approval  
 Municipal Consent Approval Date: Not Needed  
 Geometric Layout Approval Date: Not Needed  
 Construction Limits Established Date: Pending Approval  
 Original Letting Date: 12/15/2017  
 Current Letting Date: 2/22/2019  
 Construction Season: August 2019-November 2020  
 Estimated Substantial Completion: Fall 2020



Minnesota Department of Transportation  
 District 7  
 2151 Bassett Drive  
 (507) 304-6100

District Engineer: Greg Ous  
 Project Manager: Matthew Young

Revised Date: 12/15/2016

# PROJECT SUMMARY

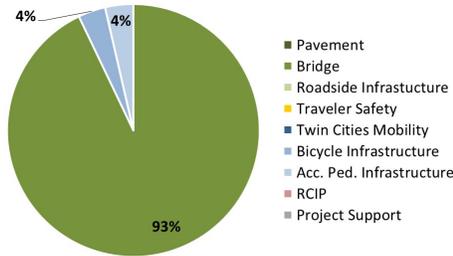
Hwy 99  
Over the Minnesota River in St Peter  
Bridge 4930  
State Project No. 4008-25  
NA



## Primary Purpose

Performance-based Need: Bridge Condition

## Investment Category



## Project Description

The project will rehabilitate a bridge (#4930) on Hwy 99 over the Minnesota River in St. Peter. The rehabilitation includes the following items: strengthening the truss floorbeams, adding a new concrete deck and sidewalk, rehabilitating the abutment and pier, completely repainting the bridge, and adding new lighting.

Hwy 99 will be detoured to Hwy 22 and CR 21 for the duration of the project.

## Recent Changes and Updates

The project was let in November 2016 with construction starting in March 2017. Construction is expected to be complete by Dec. 1, 2017.

## Project History

The purpose and need for the project is to rehabilitate the in-place bridge while preserving its historical integrity and providing a safe crossing of the Minnesota River. The existing bridge was built in 1931 and has a National Bridge Inventory structure evaluation rated at 5.

This project was let in 2014 but the low bidder was deemed non-responsible with regards to DBE goals. The project will be re-let to not conflict with other Saint Peter area work.

The project was updated to the 2016 Standard Specifications and will be re-let on Nov. 18, 2016 for construction in 2017.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2011

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 4.9	\$ 4.4
Other Construction Elements:	\$ 0.3	\$ 0.5
Engineering:	\$ 0.5	\$ 0.5
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 5.7</b>	<b>\$ 5.4</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

Project was let in 2016 for \$4.4 million. Some additional unplanned work occurred in construction due to additional deterioration of unexpected steel members.

## Project Risks

With most of the structural repairs complete, the major project risk is now to project completion. With later season temperatures sensitive to construction work, additional effort will be expended on the housing and heating parts of the bridge to accomplish the work this construction season.

## Schedule

Environmental Approval Date: 11/25/2013  
Municipal Consent Approval Date: Not Needed  
Geometric Layout Approval Date: Not Needed  
Construction Limits Established Date: Not Needed  
Original Letting Date: 1/01/2014  
Current Letting Date: 11/18/2016  
Construction Season: 2017  
Estimated Substantial Completion: October 2017



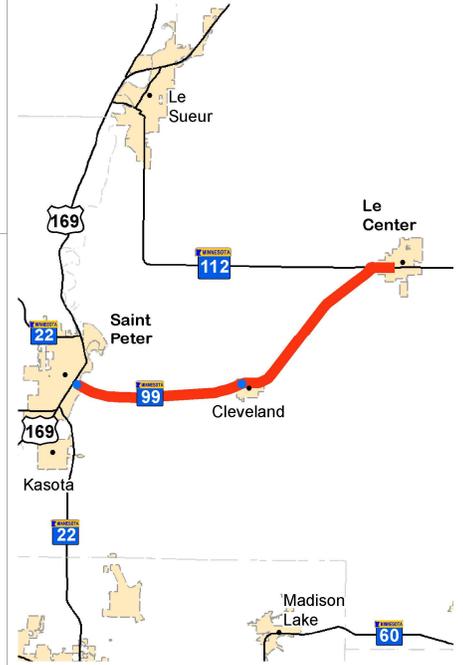
Minnesota Department of Transportation  
District 7  
2151 Bassett Drive  
(507) 304-6100

**District Engineer:** Greg Ous  
**Project Manager:** Zachary Tess

**Revised Date:** 12/15/2016

## PROJECT SUMMARY

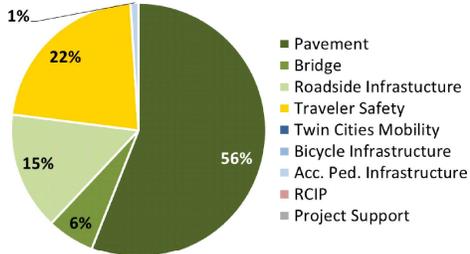
Hwy 99  
St. Peter to Le Center  
Bridge 8893  
State Project No. 4008-28  
NA



### Primary Purpose

Permanenced Based Need: Pavement Condition

### Investment Category



### Project Description

This project is a mill and overlay on Hwy 99 from Minnesota river bridge just outside of St. Peter to S Maple Ave. in Le Center, for a distance of 12.6 miles. This project is strictly a pavement resurfacing project.

### Recent Changes and Updates

Due to deteriorating pavement the district decided to split this into two projects. This project became strictly a mill & overlay and was paved in 2017. All other items will be done in 2019 on a different project. This lowered the project cost significantly.

### Project History

The project was scoped and early development is underway.  
The project became a fiscal 2019 project.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2015

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 8.1	\$ 2.7
Other Construction Elements:	\$ 0.7	\$ 0.2
Engineering:	\$ 1.5	\$ 0.5
Right of Way:	\$ 0.1	\$ 0.0
<b>Total:</b>	<b>\$ 10.4</b>	<b>\$ 3.4</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

This project was let on June 23, 2017 for a construction cost of \$2,673,879.79.

### Project Risks

None remaining

### Schedule

Environmental Approval Date: 4/25/2017  
Municipal Consent Approval Date: NA  
Geometric Layout Approval Date: NA  
Construction Limits Established Date: Spring 2017  
Original Letting Date: 12/14/2018  
Current Letting Date: 6/23/2017  
Construction Season: 2017  
Estimated Substantial Completion: Fall 2017



Minnesota Department of Transportation  
District 7  
2151 Bassett Drive  
(507) 304-6100

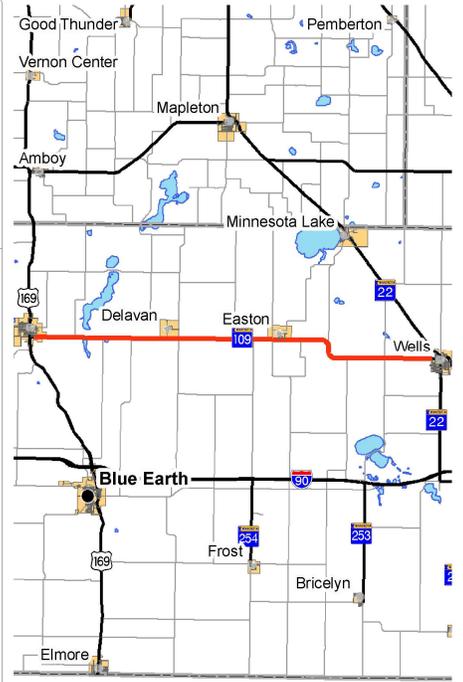
District Engineer: Greg Ous  
Project Manager: Forrest Hasty

Revised Date: 12/15/2016

# PROJECT SUMMARY

Hwy 109  
 Winnebago to Wells  
 Bridge 22X05, &, 22X06  
 State Project No. 2212-28, 2212-29

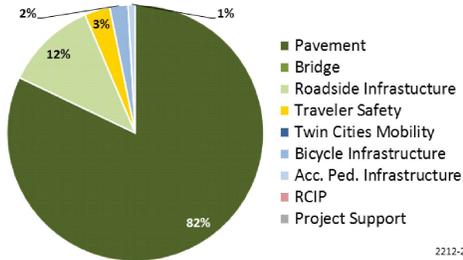
NA  
**Substantially Complete**



## Primary Purpose

Performance-based Need: Pavement

## Investment Category



2212-29

## Project Description

This project is for road repair work on about 12 miles of Hwy 109 from Winnebago to Wells.

## Recent Changes and Updates

These are two separate projects (SP 2212-28 and SP 2212-29). Both are substantially complete.

## Project History

These are pavement preservation projects.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2011

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 14.3	\$ 13.6
Other Construction Elements:	\$ 2.5	\$ 1.7
Engineering:	\$ 2.9	\$ 3.3
Right of Way:	\$ 0.2	\$ 0.1
<b>Total:</b>	<b>\$ 19.7</b>	<b>\$ 18.7</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

The construction letting cost estimate for the 2014 project, SP 2212-28, is \$9 million. The projects were both let. The current estimate is based on the actual letting cost of both the projects.

## Project Risks

Project is substantially complete so there are no further risks.

## Schedule

Environmental Approval Date: 2011  
 Municipal Consent Approval Date: Not Needed  
 Geometric Layout Approval Date: Not Needed  
 Construction Limits Established Date: Not Needed  
 Original Letting Date: 1/01/2013  
 Current Letting Date: 5/18/2012  
 Construction Season: 2012; 2014  
 Estimated Substantial Completion: 07/06/2015



Minnesota Department of Transportation  
 District 7  
 2151 Bassett Drive  
 (507) 304-6100

District Engineer: Greg Ous  
 Project Manager: Brett Benzkofer

Revised Date: 12/15/2016

# PROJECT SUMMARY

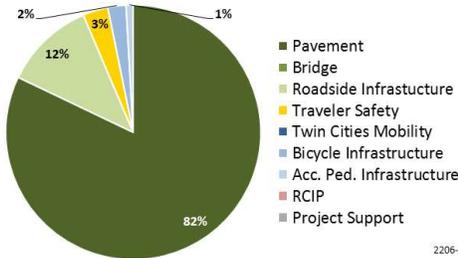
Hwy 109  
Hwy 22 in Wells to I-90 in Alden  
Bridge NA  
State Project No. 2206-13  
NA



## Primary Purpose

Performance-based Need: Pavement

## Investment Category



## Project Description

This project is a mill and overlay on Hwy 109 from the Hwy 22 intersection in Wells to the I-90 intersection in Alden. Sidewalk and pedestrian ramps will be updated in Alden to meet current ADA standards.

Sidewalk will be installed from the Dairy Queen to the Dollar General store on the south side of Hwy 109 in Wells.

Two box culverts will be replaced along the Hwy 109 corridor as well as several pipes. There will be a detour to accommodate these activities.

## Recent Changes and Updates

This project is about to be let (Sept. 22, 2017) and has gone well. The only item that was added in the past year was a few tile crossings that the county requested be removed and replaced.

## Project History

This project will resurface the pavement to achieve a smooth riding surface.

The project was scoped and pedestrian ramps and sidewalk will be replaced to meet ADA requirements in Alden. There is a railroad crossing in Alden, and a railroad agreement will be needed.

The construction limits are complete. New sidewalk will be constructed in the city of Wells and most of the sidewalk in Alden will be replaced.

The letting needed to be pushed to FY 2018. Construction in fall 2017 was considered, but construction staff limitations made that undoable. The change in construction year resulted in the estimate changing to account for additional inflation.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2013

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 5.9	\$ 6.7
Other Construction Elements:	\$ 0.5	\$ 0.5
Engineering:	\$ 1.0	\$ 1.4
Right of Way:	\$ 0.1	\$ 0.1
<b>Total:</b>	<b>\$ 7.4</b>	<b>\$ 8.4</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

The key cost estimate assumption is the pavement fix, which is anticipated to be a medium resurfacing and overlay. Transverse joint repairs are included and estimated at 15 joints per mile. This is estimated in 2012 dollars inflated to 2018 dollars. The change from 2017 to 2018 construction accounts for the increased estimate.

## Project Risks

There is the potential to find more problems with culverts during construction.

## Schedule

Environmental Approval Date: 8/24/16  
Municipal Consent Approval Date: 12/7/2015  
Geometric Layout Approval Date: Not Needed  
Construction Limits Established Date: 10/02/2015  
Original Letting Date: 1/01/2017  
Current Letting Date: 9/22/2017  
Construction Season: 2018  
Estimated Substantial Completion: Oct. 2018



Minnesota Department of Transportation  
District 7  
2151 Bassett Drive  
(507) 304-6100

**District Engineer:** Greg Ous  
**Project Manager:** Forrest Hasty

**Revised Date:** 12/15/2016

# PROJECT SUMMARY

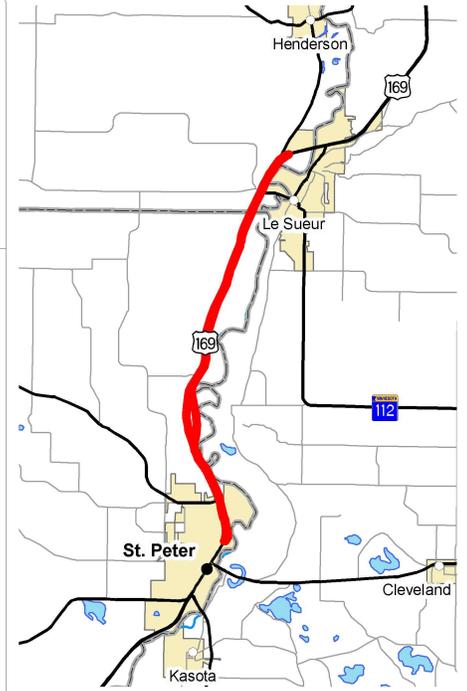
Hwy 169

Hwy 22 in St Peter to Hwy 93 at Le Sueur

Bridge 52002, 52001, 8961

State Project No. 5209-74

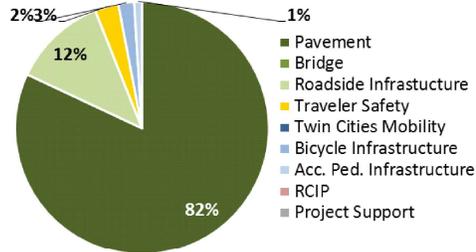
<http://www.dot.state.mn.us/d7/projects/hwy169/index.html>



## Primary Purpose

Performance-based Need: Pavement Condition, Bridge Condition

## Investment Category



## Project Description

US 169, from .45 miles south of N junction of Hwy 22 to .1 mile north of 270th St, NB lanes only, concrete surface, mill and overlay, replace bridge 52002 with new bridge 52018. On bridge 52001 bridge rail and guardrail improvements, and rehab culvert 8961 and lighting (Assoc. 5209-74S and 5209-74SH).

This project provides for an unbonded concrete overlay on the northbound lanes of Hwy 169 for about 10 miles from Hwy 22 to the north junction of Hwy 93 in Le Sueur.

## Recent Changes and Updates

Project is planned for one construction season down from a potential of two.

Project was upscoped to include guardrail and bridge rail modifications to Bridge 52001 (SB Bridge over Robarts Creek)

Project was downscoped to remove rehabilitation of bridges 52004 and 8649 (box culverts)

Experimental Intelligent Work Zone features were added to include driver warning systems for slowing or stopped traffic ahead in the work zones.

## Project History

This project will provide a smooth riding surface on the northbound lanes of Hwy 169, which is a High Priority Interregional Corridor.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2014

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 6.3	\$ 15.0
Other Construction Elements:	\$ 0.4	\$ 1.0
Engineering:	\$ 1.1	\$ 3.1
Right of Way:	\$ 0.0	\$ 0.2
<b>Total:</b>	<b>\$ 7.8</b>	<b>\$ 19.2</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

The cost estimate assumes construction in 2018.

## Project Risks

Majors risks were mitigated. CATEX was completed Feb 2017, however, there is a minor risk that USCORP will not agree and additional environmental mitigation will be required.

## Schedule

Environmental Approval Date: Feb 2, 2017  
 Municipal Consent Approval Date: Not Needed  
 Geometric Layout Approval Date: Not Needed  
 Construction Limits Established Date: 03/14/2016  
 Original Letting Date: 11/17/2017  
 Current Letting Date: 11/17/2017  
 Construction Season: 2018  
 Estimated Substantial Completion: 2018



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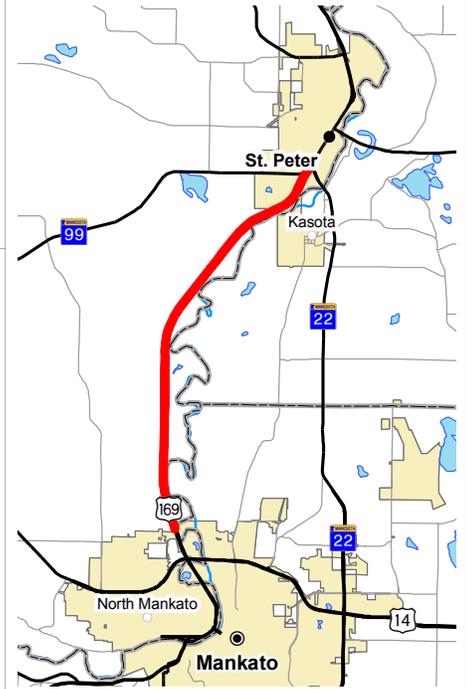
District Engineer: Greg Ous  
 Project Manager: Peter Harff

Revised Date: 12/15/2016

# PROJECT SUMMARY

Hwy 169  
 Hwy 14 in Mankato to St. Peter  
 Bridge NA  
 State Project No. 5211-59, 5211-59ED  
<http://www.dot.state.mn.us/d7/projects/floodmitigation/>

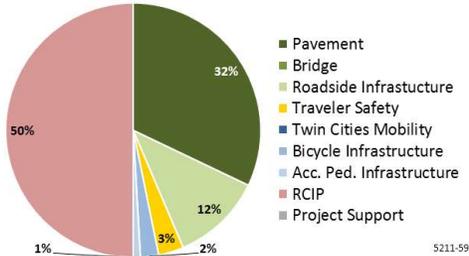
**Substantially Complete**



## Primary Purpose

Regional & Community Improvement Priority

## Investment Category



## Project Description

This project reconstructs and raises 3.2 miles of Hwy 169 over a 9.1 mile stretch from Mankato to St. Peter. It includes installing a median barrier down the center of Hwy 169 to mitigate cross median crashes.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2013

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 14.6	\$ 17.0
Other Construction Elements:	\$ 1.2	\$ 1.2
Engineering:	\$ 2.7	\$ 2.7
Right of Way:	\$ 0.1	\$ 0.1
<b>Total:</b>	<b>\$ 18.6</b>	<b>\$ 21.0</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Recent Changes and Updates

The project was completed in fall 2016 except for bendway weirs in the Minnesota River. The water has been too high for that work to be completed. As of Nov. 1, 2017, the water is still not low enough to complete the work.

## Project History

This project received a \$9.8 million federal grant from the Economic Development Administration, U.S. Department of Commerce.

Except for the bendway weirs, the project was constructed in 2016. Construction was completed one month ahead of the original target date due to an incentive for early completion. Traffic management was successful.

## Key Cost Estimate Assumptions

The current estimate for construction letting is based on the actual accepted bid amount.

## Project Risks

The bendway weirs may not get done under this contract as the river has not yet gone down.

## Schedule

Environmental Approval Date: 3/11/2013  
 Municipal Consent Approval Date: Not Needed  
 Geometric Layout Approval Date: 5/06/2015  
 Construction Limits Established Date: 6/01/2014  
 Original Letting Date: 11/20/2015  
 Current Letting Date: 12/18/2015  
 Construction Season: 2016  
 Estimated Substantial Completion: Fall 2016



Minnesota Department of Transportation  
 District 7  
 2151 Bassett Drive  
 (507) 304-6100

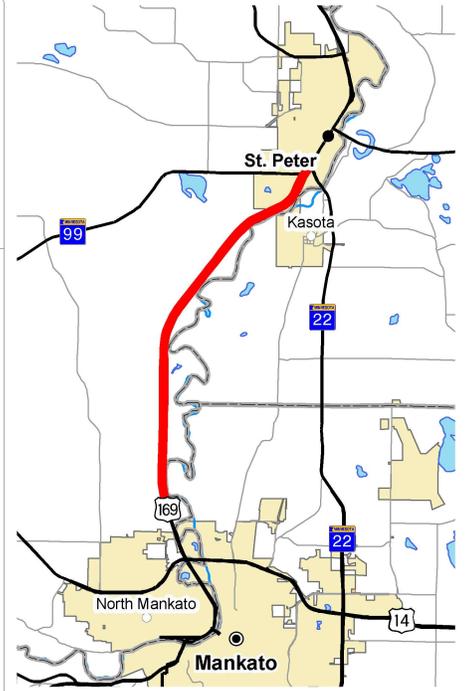
**District Engineer:** Greg Ous  
**Project Manager:** Peter Harff

**Revised Date:** 12/15/2016

## PROJECT SUMMARY

Hwy 169  
Hwy 14 in Mankato to St. Peter  
Bridge NA  
State Project No. 5211-61

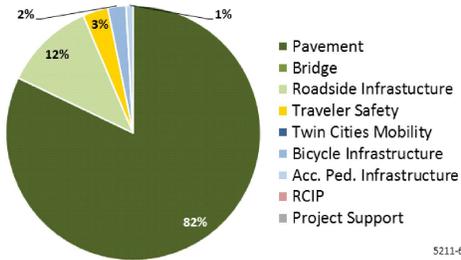
**Substantially Complete**



### Primary Purpose

Performance-based Need: Pavement

### Investment Category



5211-61

### Project Description

The project preserves almost 6 miles of pavement along Hwy 169 from Mankato to St. Peter. It also installs a median barrier down the center of Hwy 169 to mitigate cross median crashes to improve safety.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2013

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 10.2	\$ 12.9
Other Construction Elements:	\$ 0.6	\$ 0.7
Engineering:	\$ 1.8	\$ 2.0
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 12.6</b>	<b>\$ 15.6</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Recent Changes and Updates

The project was completed in fall 2016 except for bendway weirs in the Minnesota River. The water has been too high for that work to be completed. As of Nov. 1, 2017, the water is still not low enough to complete the work.

### Project History

This project is the counterpart to SP 5211-59, which is the reconstruction project from Mankato to St. Peter. This project does not have U.S. Department of Commerce funding.

The cost estimate increased due to the decision to use concrete median barrier for safety and use full depth concrete for the median pavement to speed up construction.

The project was constructed in 2016. Construction was completed one month ahead of the original target date due to an incentive for early completion. Traffic management was successful.

### Key Cost Estimate Assumptions

The current estimate for construction letting is based on the actual accepted bid amount.

### Project Risks

Water may remain high and the bendway weirs may need to be dropped from this contract and added to another.

### Schedule

Environmental Approval Date: Not needed  
Municipal Consent Approval Date: Not Needed  
Geometric Layout Approval Date: Not Needed  
Construction Limits Established Date: 06/01/2014  
Original Letting Date: 10/20/2015  
Current Letting Date: 12/18/2015  
Construction Season: 2016  
Estimated Substantial Completion: Fall 2017



Minnesota Department of Transportation  
District 7  
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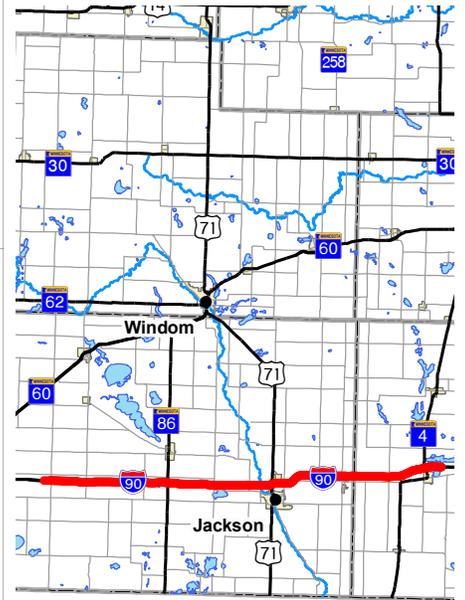
District Engineer: Greg Ous  
Project Manager: Peter Harff

Revised Date: 12/15/2016

## PROJECT SUMMARY

I-90  
 Eastbound Hwy 86 to Hwy 4 & westbound Hwy 5 to Hwy 4  
 Bridge NA  
 State Project No. 3280-126

Substantially Complete



### Primary Purpose

Performance-based Need: Pavement

### Investment Category

\*This project was designed and scoped before the current highway investment plan MnSHIP was developed, which breaks projects into investment categories.

### Project Description

This project is for pavement resurfacing on I-90. The resurfacing includes the eastbound lanes between Hwy 86 and Hwy 4 and the westbound lanes between Hwy 5 and Hwy 4. The pavement surface will have both concrete and bituminous sections. This is an attempt to maximize the service life of the repair.

### Recent Changes and Updates

Project is complete. Change orders were needed during construction, causing the cost to increase. Notably, there was an addition of a chip seal for the bituminous portion of the project, which was after substantial completion. This caused the project to run longer, thus the need for more engineering.

### Project History

This project now includes work on what used to be under other MnDOT projects (SP's 3280-120, 3280-121, and 3208-122). The pavement surface is rough and the ride quality index does not meet the statewide targets set for interstate highways. This project will resurface the pavement to provide a smooth ride and meet performance targets for ride quality, and provide a longer service life.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2014

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 36.3	\$ 36.3
Other Construction Elements:	\$ 0.8	\$ 2.1
Engineering:	\$ 2.0	\$ 2.3
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 39.1</b>	<b>\$ 40.7</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

This is a variable scope, fixed cost project. It uses the design/build method of contracting.

### Project Risks

Trying to define a variable scope project in an RFP is challenging. There may be a need to shift money from Construction Letting to Other Construction Elements to keep the Total Project Cost Estimate under \$39.1 million.

### Schedule

Environmental Approval Date: Pending Approval  
 Municipal Consent Approval Date: Not Needed  
 Geometric Layout Approval Date: Not Needed  
 Construction Limits Established Date: Not Needed  
 Original Letting Date: 1/21/2015  
 Current Letting Date: 2/24/2015  
 Construction Season: May 2015/Nov 2015  
 Estimated Substantial Completion: 7/31/2016



Minnesota Department of Transportation  
 District 7  
 2151 Bassett Drive  
 (507) 304-6100

**District Engineer:** Greg Ous  
**Project Manager:** Matt Rottermond

**Revised Date:** 12/15/2016

# PROJECT SUMMARY

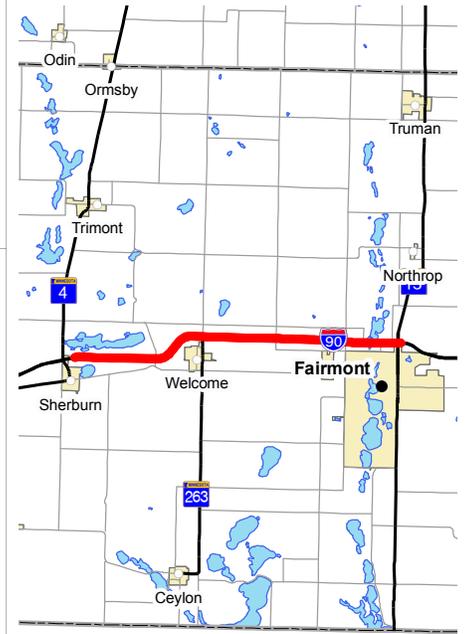
I-90

Sherburn to Fairmont

Bridge Multiple

State Project No. 4680-126

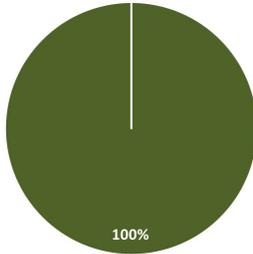
<http://www.dot.state.mn.us/d7/projects/I90preserve/>



## Primary Purpose

Performance-based Need: Pavement

## Investment Category



- Pavement
- Bridge
- Roadside Infrastructure
- Traveler Safety
- Twin Cities Mobility
- Bicycle Infrastructure
- Acc. Ped. Infrastructure
- RCIP
- Project Support

## Project Description

This project is a mill and overlay of the westbound lanes on I-90, between Hwy 4 in Sherburn and just east of Hwy 15 in Fairmont. There will also be some drainage, lighting, and guardrail repairs. The bridge end posts will also be upgraded.

## Recent Changes and Updates

The end post upgrades were added to the project in order to meet current guardrail safety standards.

Bridge work was removed from plans in another project (SP 4680-124) and brought into this project, which resulted in an increased cost estimate.

[pw:\pw8i.ad.dot.state.mn.us/cadp/Documents/Projects/D7\\_MKO\090\4680\126\FinalPlan\SubmittedToCO\SP4680-126\(90\)\\_CATEX.pdf](http://pw8i.ad.dot.state.mn.us/cadp/Documents/Projects/D7_MKO\090\4680\126\FinalPlan\SubmittedToCO\SP4680-126(90)_CATEX.pdf)

## Project History

This project was added to the FY 2017 program. This acceleration was made possible due to an additional \$25 million investment in I-90 made in 2014-2015, which was funded by savings from other projects.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2014

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 7.4	\$ 7.4
Other Construction Elements:	\$ 0.5	\$ 0.4
Engineering:	\$ 0.5	\$ 1.8
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 8.4</b>	<b>\$ 9.6</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

The current estimate is the actual bid amount.

## Project Risks

There are no remaining risks.

## Schedule

Environmental Approval Date: 09/30/2016  
 Municipal Consent Approval Date: Not needed  
 Geometric Layout Approval Date: Not needed  
 Construction Limits Established Date: Not needed  
 Original Letting Date: 12/16/2016  
 Current Letting Date: 12/16/2016  
 Construction Season: 2017  
 Estimated Substantial Completion: 12/01/2017



Minnesota Department of Transportation  
 District 7  
 2151 Bassett Drive  
 (507) 304-6100

**District Engineer:** Greg Ous  
**Project Manager:** Andrew Lawver

**Revised Date:** 12/15/2016

# PROJECT SUMMARY

I-90

Worthington to Rushmore

Bridge 53815, &, 53816

State Project No. 5380-133

<http://www.dot.state.mn.us/d7/projects/I90preserve/>

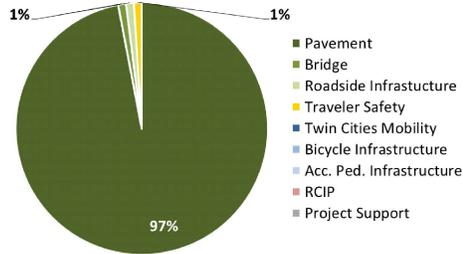
**Substantially Complete**



## Primary Purpose

Performance-based Need: Pavement

## Investment Category



## Project Description

This project includes resurfacing the eastbound and westbound lanes of I-90 from Hwy 60 in Worthington to near Rushmore. The type and thickness for the resurfacing have yet to be determined. The project will also include lighting replacement, drainage repairs and possibly some bridge repairs as well.

## Recent Changes and Updates

Construction is complete.

## Project History

This project for resurfacing west of Hwy 60 was scoped in 2012 for a potential 2016 letting. The project was deferred indefinitely due to a lack of funding.

The resurfacing project for east of Hwy 60 was scoped in 2014 for a potential 2018 letting. The resurfacing project for west of Hwy 60 was moved back into the program in FY 2017 because additional funds were made available from savings on other projects. Both projects were combined to realize some project delivery and scale efficiencies.

The upgrade to replace end posts for bridges (#53815 and #53816) was added to meet current guardrail safety standards.

To balance the construction workload, it was decided to build the project in late 2016 (making it a FY 2017 Early Let-Late Award, or ELLA, project).

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2014

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 9.6	\$ 7.3
Other Construction Elements:	\$ 0.7	\$ 0.9
Engineering:	\$ 1.9	\$ 0.4
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 12.2</b>	<b>\$ 8.6</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

The project was let; the current estimate is based on the first year substantially complete project cost accounting.

## Project Risks

There are no remaining identified risks.

## Schedule

Environmental Approval Date: 1/19/2016  
 Municipal Consent Approval Date: Not Needed  
 Geometric Layout Approval Date: Not Needed  
 Construction Limits Established Date: Not Needed  
 Original Letting Date: 10/28/2015  
 Current Letting Date: 3/18/2016  
 Construction Season: 2016  
 Estimated Substantial Completion: 12/01/2016



Minnesota Department of Transportation  
 District 7  
 2151 Bassett Drive  
 (507) 304-6100

District Engineer: Greg Ous  
 Project Manager: Robert Sneller

Revised Date: 12/15/2016

# PROJECT SUMMARY

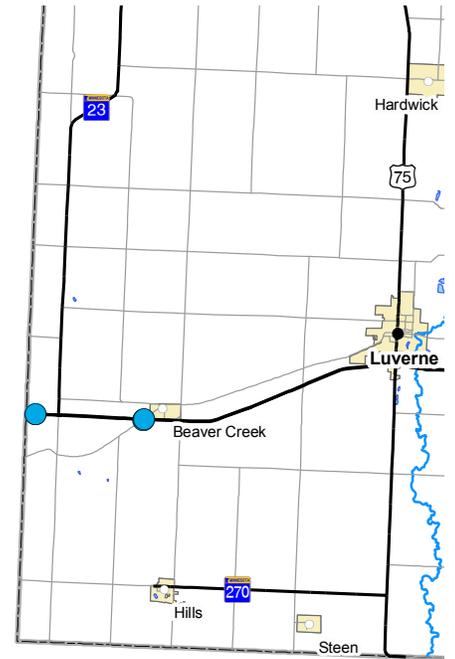
I-90

South Dakota border to east of Hwy 23

Bridge 9685, 9686, 9689, &, 9690

State Project No. 6780-105

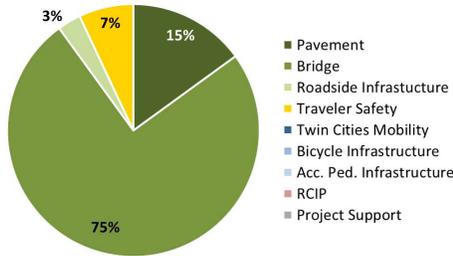
<http://www.dot.state.mn.us/d7/projects/I90preserve/>



## Primary Purpose

Performance-based Need: Bridge Condition

## Investment Category



## Project Description

This project involves rehabilitating four bridges on I-90 near Beaver Creek, from the South Dakota border to 2.9 mi east of Hwy 23. The project will also construct permanent median crossovers for traffic control and safety. A stormwater pond will be constructed to meet permit requirements.

## Recent Changes and Updates

No changes.

## Project History

The bridges were built in the early 1960s and the purpose of the project is to rehabilitate the bridges.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2013

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 4.6	\$ 6.8
Other Construction Elements:	\$ 0.2	\$ 0.2
Engineering:	\$ 0.9	\$ 0.9
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 5.8</b>	<b>\$ 7.9</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

Project currently under construction.

Project wMarch 24,2017 with PCiRoads, LLC with the winning bid of \$6,791,564.81. The baseline estimate was outdated and the MnDOT pre-letting estimate was in line with the winning bid.

## Project Risks

All risks retired.

## Schedule

Environmental Approval Date: 3/24/2017  
 Municipal Consent Approval Date: Not Needed  
 Geometric Layout Approval Date: Not Needed  
 Construction Limits Established Date: Not Needed  
 Original Letting Date: 3/24/2017  
 Current Letting Date: 3/24/2017  
 Construction Season: Summer 2017  
 Estimated Substantial Completion: 11/2017



Minnesota Department of Transportation  
 District 7  
 2151 Bassett Drive  
 (507) 304-6100

**District Engineer:** Greg Ous  
**Project Manager:** Matthew Young

**Revised Date:** 12/15/2016

## PROJECT SUMMARY

I-90  
Des Moines Rest Area  
Bridge NA  
State Project No. 3280-130  
NA



### Primary Purpose

Performance-based need: Roadside Infrastructure Condition

### Investment Category

\*This project was designed and scoped before the current highway investment plan MnSHIP was developed, which breaks projects into investment categories.

### Project Description

The project involves improvements to the Des Moines Rest Area located along I-90 near Hwy 70.

### Recent Changes and Updates

This project has not been scoped, so it is not yet fully known what it entails or what the costs total. Scoping and costs for rest areas are generally developed in central office with construction inspection managed through the district.

### Project History

This project has been developed this year.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2016

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 6.5	\$ 6.5
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 1.3	\$ 1.3
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 7.8</b>	<b>\$ 7.8</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

This project has not yet been scoped. The estimate is an early placeholder.

### Project Risks

The project has not yet been scoped. Risks have not been identified.

### Schedule

Environmental Approval Date: Need Unknown  
Municipal Consent Approval Date: Not needed  
Geometric Layout Approval Date: Need Unknown  
Construction Limits Established Date: Need Unknown  
Original Letting Date: 1/01/2020  
Current Letting Date: 1/01/2020  
Construction Season: 2020  
Estimated Substantial Completion: 2021



Minnesota Department of Transportation  
District 7  
2151 Bassett Drive  
(507) 304-6100

**District Engineer:** Greg Ous  
**Project Manager:** Robert H Williams

**Revised Date:** 12/15/2016

## PROJECT SUMMARY

I-90  
I-90  
Clear Lake Rest Area  
Bridge NA  
State Project No. 3280-129



### Primary Purpose

Performance-based need: Roadside Infrastructure Condition

### Investment Category

\*This project was designed and scoped before the current highway investment plan MnSHIP was developed, which breaks projects into investment categories.

### Project Description

This project involves improvements to the Clear Lake Rest Area that is located along I-90, west of the city of Jackson.

### Recent Changes and Updates

This project has not been scoped, so it is not yet fully known what it entails or what the costs total. Scoping and costs for rest areas are generally developed in the central office with construction inspection managed through the district.

### Project History

This project has been developed this year.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2016

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 6.5	\$ 6.5
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 1.3	\$ 1.3
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 7.8</b>	<b>\$ 7.8</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

The project has not yet been scoped. This estimate is a placeholder until more is known.

### Project Risks

The project has not yet been scoped so risks have not been identified.

### Schedule

Environmental Approval Date: Need Unknown  
Municipal Consent Approval Date: Not Needed  
Geometric Layout Approval Date: Not Needed  
Construction Limits Established Date: Need Unknown  
Original Letting Date: 1/01/2019  
Current Letting Date: 1/01/2019  
Construction Season: 2019  
Estimated Substantial Completion: 2020



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District 7  
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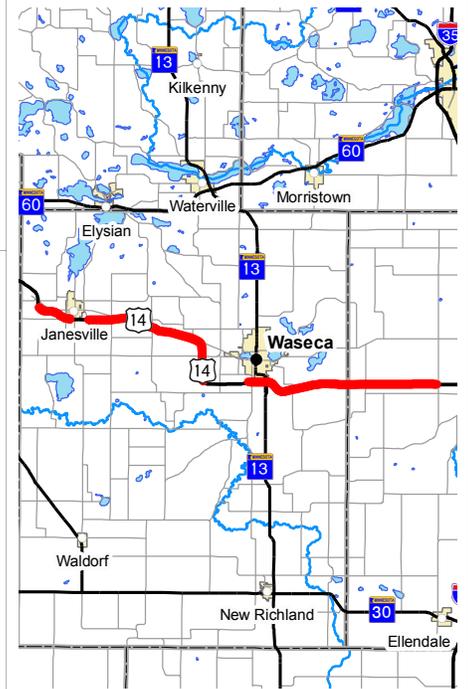
**District Engineer:** Greg Ous  
**Project Manager:** Robert H Williams

**Revised Date:** 12/15/2016

## PROJECT SUMMARY

Old Hwy 14  
West of Janesville to Owatonna city limits  
Bridge NA  
State Project No. 8103-113

Substantially Complete



### Primary Purpose

Performance-based Need: Pavement

### Investment Category

\*This project was designed and scoped before the current highway investment plan MnSHIP was developed, which breaks projects into investment categories.

### Project Description

This project is a design-build project on the rural portions of Old Hwy 14 between Waseca CR 60, west of Janesville, and the Owatonna city limits. It consists of a concrete overlay and drainage improvements. The project does not include work in the cities of Janesville and Waseca.

### Recent Changes and Updates

Construction is complete.

### Project History

The legislature recently passed the law allowing for construction of this project according to the Settlement Agreement. The turnback of Old Hwy 14 in Waseca and Steele counties was contested. A Settlement Agreement defined what was to be constructed.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2014

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 8.6	\$ 14.7
Other Construction Elements:	\$ 0.6	\$ 3.2
Engineering:	\$ 1.7	\$ 1.3
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 10.9</b>	<b>\$ 19.2</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

The current estimate is the substantially complete actual project cost accounting. The baseline estimate was low because it was made based on very rough assumptions that did not account for the additional costs that would result when negotiations were complete. Also, there was a lack of competition in bidding resulting in a higher cost.

### Project Risks

The Settlement Agreement was very prescriptive in some areas and vague in others.

### Schedule

Environmental Approval Date: Not Needed  
Municipal Consent Approval Date: Not Needed  
Geometric Layout Approval Date: Not Needed  
Construction Limits Established Date: Not Needed  
Original Letting Date: 12/03/2014  
Current Letting Date: 12/03/2014  
Construction Season: May 2015 - Nov 2015  
Estimated Substantial Completion: 11/01/2015



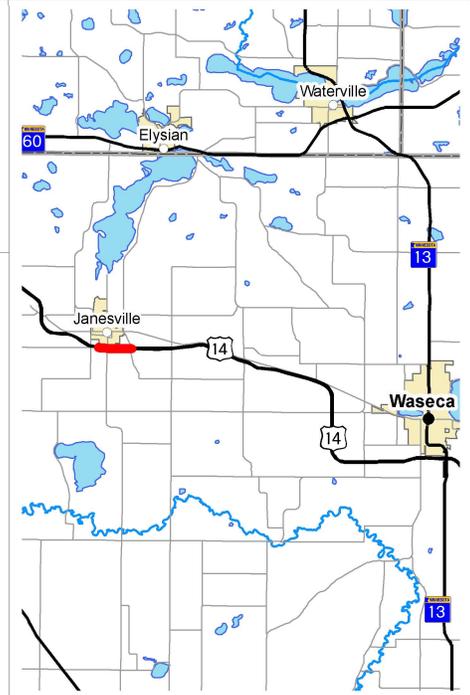
Minnesota Department of Transportation  
District 7  
2151 Bassett Drive  
(507) 304-6100

**District Engineer:** Greg Ous  
**Project Manager:** Matt Rottermond

**Revised Date:** 12/15/2016

# PROJECT SUMMARY

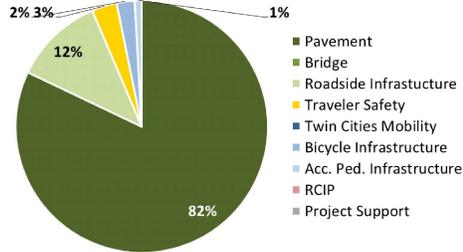
Old Hwy 14  
 Janesville  
 Bridge NA  
 State Project No. 8103-114  
 NA



## Primary Purpose

Performance-based Need: Pavement

## Investment Category



## Project Description

This project consists of the reconstruction of Old Hwy 14 within the city limits of Janesville. The city will be replacing the utilities in conjunction with this project. A new concrete surface will be provided with curb and gutter.

## Recent Changes and Updates

This project is complete.

## Project History

The legislature recently passed the law allowing for the construction of this project according to the Settlement Agreement. The turnback of Old Hwy 14 in Waseca and Steele counties was contested. A Settlement Agreement defined what was to be constructed.

Construction was planned for 2015; however, the city of Janesville is leading the project development and decided to move construction to 2016. The letting date was moved and the cost estimate was updated to account for an additional year of inflation, but a very good bid still brought the actual in below the initial estimate.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2014

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 4.6	\$ 4.0
Other Construction Elements:	\$ 0.3	\$ 0.3
Engineering:	\$ 0.9	\$ 0.9
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 5.8</b>	<b>\$ 5.2</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

The current estimate cost given is only for the state share of the actual letting cost.

## Project Risks

The Settlement Agreement was very prescriptive in some areas and vague in others.

## Schedule

Environmental Approval Date: Not Needed  
 Municipal Consent Approval Date: Not Needed  
 Geometric Layout Approval Date: Not Needed  
 Construction Limits Established Date: Not Needed  
 Original Letting Date: 4/15/2015  
 Current Letting Date: 3/05/2016  
 Construction Season: May 2016 - Nov 2016  
 Estimated Substantial Completion: 11/01/2016



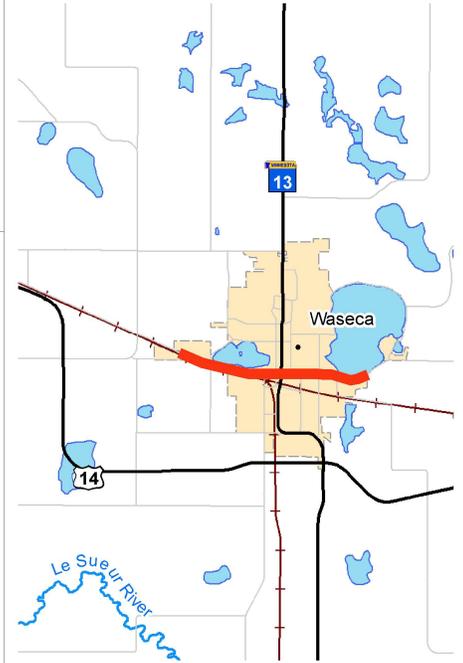
Minnesota Department of Transportation  
 District 7  
 2151 Bassett Drive  
 (507) 304-6100

District Engineer: Greg Ous  
 Project Manager: Matt Rottermond

Revised Date: 12/15/2016

## PROJECT SUMMARY

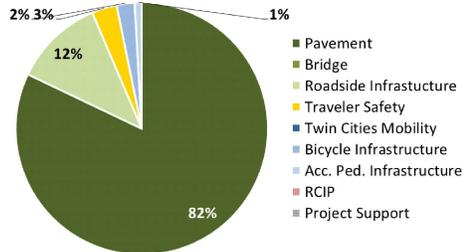
Old Hwy 14  
From west to east Waseca city limits  
Bridge NA  
State Project No. 8103-115  
NA



### Primary Purpose

Performance-based Need: Pavement

### Investment Category



### Project Description

This project consists of reconstruction of Old Hwy 14 through Waseca. The city will replace the utilities in conjunction with this project. A new concrete surface will be provided with the curb and gutter.

### Recent Changes and Updates

This project is under construction. It is a two year project, scheduled to be completed in the fall of 2018.

### Project History

The legislature recently passed the law allowing for the construction of this project according to the Settlement Agreement. The turnback of Old Hwy 14 in Waseca and Steele counties was contested. A Settlement Agreement was defined what was to be constructed.

The City of Waseca is leading the project. They are applying federal funds and will do a separate environmental document.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2014

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 17.8	\$ 18.3
Other Construction Elements:	\$ 1.0	\$ 1.0
Engineering:	\$ 2.7	\$ 2.7
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 21.5</b>	<b>\$ 22.0</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

The current estimate is the let amount. Of that, approximately \$14 million is state cost.

### Project Risks

The Settlement Agreement was very prescriptive in some areas and vague in others.

### Schedule

Environmental Approval Date: Not Needed  
Municipal Consent Approval Date: Not Needed  
Geometric Layout Approval Date: Not Needed  
Construction Limits Established Date: Not Needed  
Original Letting Date: 4/15/2016  
Current Letting Date: 12/15/2016  
Construction Season: May 2017 - Nov 2018  
Estimated Substantial Completion: 11/01/2018



Minnesota Department of Transportation  
District 7  
2151 Bassett Drive  
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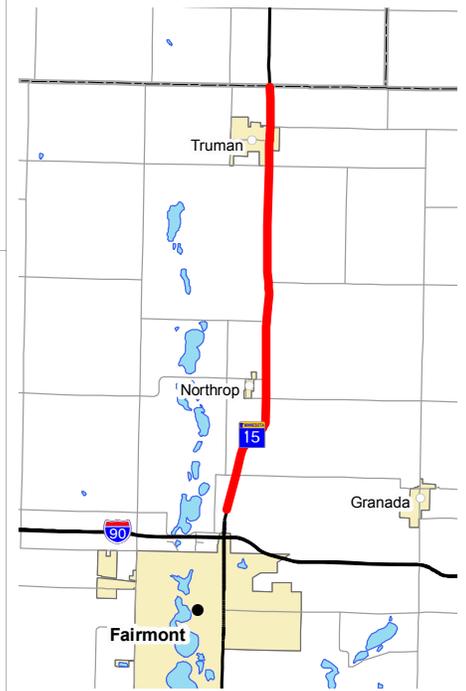
District Engineer: Greg Ous  
Project Manager: Matt Rottermond

Revised Date: 12/15/2016

## PROJECT SUMMARY

Hwy 15  
I-90 to Hwy 54 in Truman & county line to Hwy 24  
Bridge NA  
State Project No. 4604-32, &, 0805-112

Substantially Complete



### Primary Purpose

Performance-based Need: Pavement

### Investment Category

\*This project was designed and scoped before the current highway investment plan MnSHIP was developed, which breaks projects into investment categories.

### Project Description

This project is a bituminous overlay for about 11 miles from I-90 to Hwy 54 in Truman. It also includes ADA improvements in Truman. The project overlays seven miles from Watonwan/Brown county line to just south of Hwy 24.

### Recent Changes and Updates

The project is now substantially complete.

### Project History

Another project, SP 0805-112, was tied to this project.

The road surface is rough and deteriorating. This project will resurface the pavement to achieve a smooth riding surface.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2013

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 5.1	\$ 6.8
Other Construction Elements:	\$ 0.2	\$ 0.1
Engineering:	\$ 1.0	\$ 0.4
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 6.3</b>	<b>\$ 7.3</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

The estimate was based on mill and bituminous overlay costs with ADA work. The current estimate construction cost is the awarded bid.

### Project Risks

There are no remaining risks identified.

### Schedule

Environmental Approval Date: 12/16/2013  
Municipal Consent Approval Date: Not Needed  
Geometric Layout Approval Date: Not Needed  
Construction Limits Established Date: 08/08/2013  
Original Letting Date: 03/28/2014  
Current Letting Date: 03/28/2014  
Construction Season: 2014  
Estimated Substantial Completion: Fall 2014



Minnesota Department of Transportation  
District 7  
2151 Bassett Drive  
(507) 304-6100

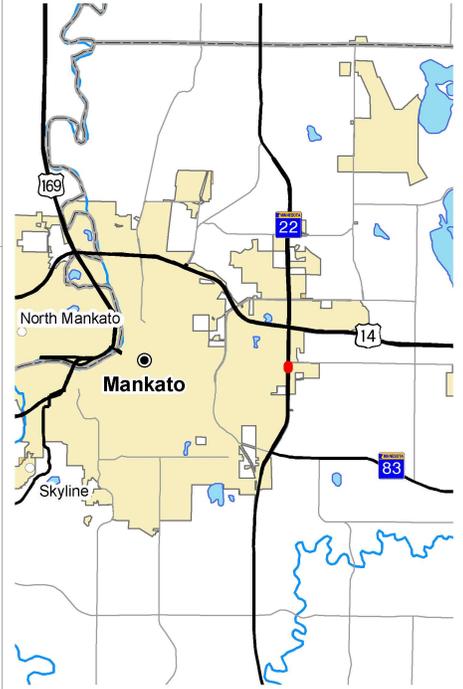
**District Engineer:** Greg Ous  
**Project Manager:** Kent Purrier

**Revised Date:** 12/15/2016

## PROJECT SUMMARY

Hwy 22  
Mankato, from Hwy 83 to County Road 26  
Bridge NA  
State Project No. 0704-88

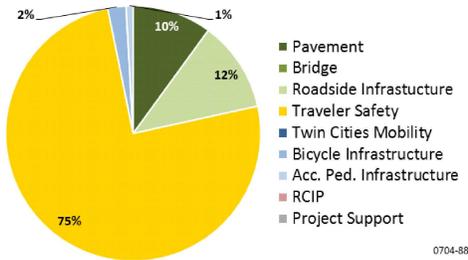
Substantially Complete



### Primary Purpose

Performance-based Need: District Safety Plan

### Investment Category



0704-88

### Project Description

The project consisted of constructing roundabouts on Hwy 22 at the intersections of Madison Avenue and Adams Street, rehabilitating concrete pavement, and installing flashing yellow arrows at intersecting side roads.

### Recent Changes and Updates

Project construction is substantially complete.

### Project History

MnDOT partnered with the city and county to optimize construction staging, and to minimize the duration of impacts to businesses with an accelerated construction schedule. The project limits were extended to address traffic signal modifications at the surrounding intersections. Constructing the roundabouts will improve safety and reduce signal delay. The signalized intersections of Hwy 22 with Madison Avenue and Adams Street had the highest crash rating in District 7, so this project will greatly enhance safety.

An extensive educational campaign was implemented to educate drivers on navigating multilane roundabouts. Construction began in May 2014 and the roadway was open to traffic at the end of August 2014.

The bids came in somewhat over the estimate likely due to the timing requirements put on the contractor.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2011

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 6.6	\$ 7.1
Other Construction Elements:	\$ 2.9	\$ 3.3
Engineering:	\$ 1.3	\$ 1.3
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 8.3</b>	<b>\$ 11.6</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

The project's construction was accelerated, with completion in one construction season. The letting cost includes the city and county share of \$2.6 million for cost sharing on Madison Avenue and Adams Street. The construction letting was based on the low bid received.

### Project Risks

There no remaining project risks identified.

### Schedule

Environmental Approval Date: 11/15/2013  
Municipal Consent Approval Date: Not Needed  
Geometric Layout Approval Date: 6/10/2013  
Construction Limits Established Date: 06/10/2013  
Original Letting Date: 01/25/2014  
Current Letting Date: 02/28/2014  
Construction Season: 2014  
Estimated Substantial Completion: Fall 2014



Minnesota Department of Transportation  
District 7  
2151 Bassett Drive  
(507) 304-6100

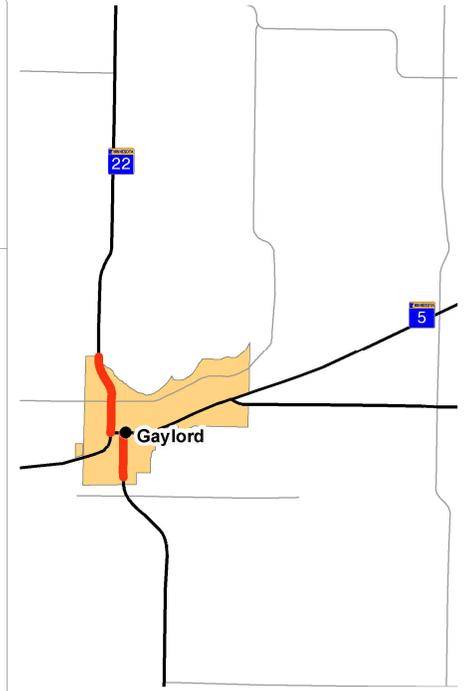
District Engineer: Greg Ous  
Project Manager: Glen Coudron

Revised Date: 12/15/2016

## PROJECT SUMMARY

Hwy 22, Hwy 5, Hwy 19  
Gaylord  
Bridge NA  
State Project No. 7207-20

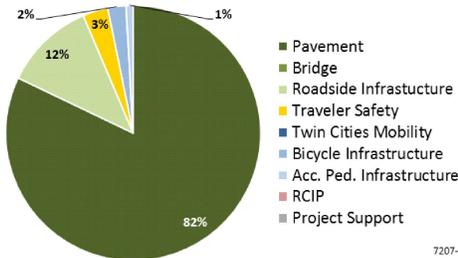
**Substantially Complete**



### Primary Purpose

Performance-based Need: Pavement

### Investment Category



### Project Description

This project is in Gaylord, to reconstruct approximately 1.5 miles of Hwys 5, 19 and 22 and to overlay another 0.3 miles of Hwy 22. The project will also replace failing city utilities.

### Recent Changes and Updates

Construction was completed in fall 2015.

### Project History

The project was completed in fall 2015.

This project was first identified as a resurfacing project, but was ultimately revised to be primarily a full reconstruction to accommodate the replacement of failing city utilities. The portion of Hwy 22 south of the railroad tracks remains a mill and overlay section. The project letting was shifted by one month due to a large volume of project lettings at the central office.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2011

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 5.1	\$ 10.2
Other Construction Elements:	\$ 0.6	\$ 0.3
Engineering:	\$ 1.1	\$ 1.8
Right of Way:	\$ 0.3	\$ 0.8
<b>Total:</b>	<b>\$ 7.1</b>	<b>\$ 13.0</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

The current estimate is based on the awarded contract price, which includes concrete pavement in the downtown business area, combined with the original estimated costs for the other three categories. Local cost share adds an additional \$3.3 million to the construction letting costs estimate.

### Project Risks

The project is complete so risks are retired.

### Schedule

Environmental Approval Date: 01/07/2014  
Municipal Consent Approval Date: 11/06/2013  
Geometric Layout Approval Date: 1/23/2013  
Construction Limits Established Date: 9/20/2012  
Original Letting Date: 12/20/2013  
Current Letting Date: 5/16/2014  
Construction Season: 2014 - 2015  
Estimated Substantial Completion: Fall 2015



Minnesota Department of Transportation  
District 7  
2151 Bassett Drive  
(507) 304-6100

District Engineer: Greg Ous  
Project Manager: Steve Bowers

Revised Date: 12/15/2016

## PROJECT SUMMARY

Hwy 62  
 Fulda to Windom  
 Bridge 17X02, &, 17X03  
 State Project No. 1704-27

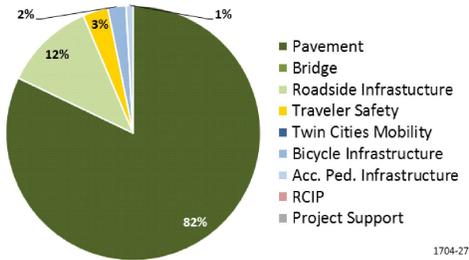
NA  
**Substantially Complete**



### Primary Purpose

Performance-based Need: Pavement

### Investment Category



### Project Description

This project resurfaced the pavement with a bituminous overlay and paved 2 feet of the shoulders, for approximately 23 miles of Hwy 62 from Hwy 59 in Fulda to the western limits of Windom. Several culverts were also repaired.

### Recent Changes and Updates

The project is substantially complete.

### Project History

This is a pavement preservation project that was moved from FY 2015 to FY 2014. The cost change was due to the year of construction change and associated inflation factors. The current estimate is based on the actual letting costs.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2011

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 14.1	\$ 9.9
Other Construction Elements:	\$ 1.6	\$ 0.7
Engineering:	\$ 2.8	\$ 1.0
Right of Way:	\$ 0.1	\$ 0.2
<b>Total:</b>	<b>\$ 18.6</b>	<b>\$ 11.8</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

The current estimate is based on the awarded contract.

### Project Risks

Any previous project risks were eliminated.

### Schedule

Environmental Approval Date: 01/17/2014  
 Municipal Consent Approval Date: Not Needed  
 Geometric Layout Approval Date: Not Needed  
 Construction Limits Established Date: 5/30/2012  
 Original Letting Date: 3/22/2013  
 Current Letting Date: 3/28/2014  
 Construction Season: 2014  
 Estimated Substantial Completion: Fall 2014



Minnesota Department of Transportation  
 District 7  
 2151 Bassett Drive  
 (507) 304-6100

District Engineer: Greg Ous  
 Project Manager: Kent Purrier

Revised Date: 12/15/2016

# PROJECT SUMMARY

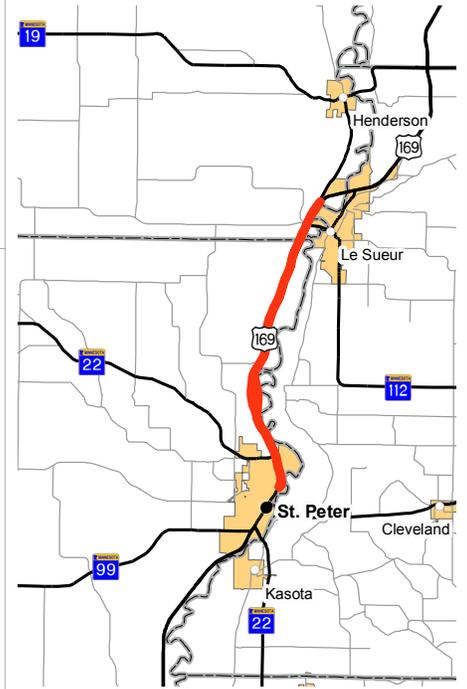
Hwy 169

St. Peter to Le Sueur, south of the Minnesota River Bridge  
Bridge NA

State Project No. 5209-66

<http://www.dot.state.mn.us/d7/projects/floodmitigation/>

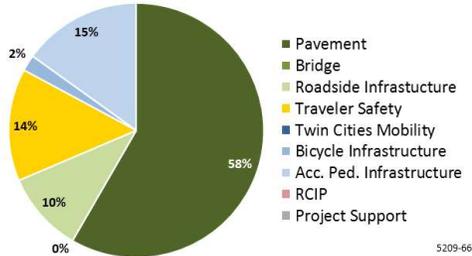
**Substantially Complete**



## Primary Purpose

Performance-based Need: Flood Mitigation

## Investment Category



## Project Description

This project raised the grade of the southbound lanes in two areas and preserved the southbound lanes in non-grade raise areas between St. Peter and Le Sueur.

## Recent Changes and Updates

This project is substantially complete.

## Project History

This project was constructed in 2014 with the clean up work occurring in spring 2015.

The project scope included additional work to regrade sections of the road to be reconstructed for high water events. This project is an alternate bid project.

When the highway was originally constructed in the early 1960s, the Minnesota River high water elevation was assumed at 751.0 feet, and the roadway was constructed accordingly. The actual 100-year flood elevation in this area ranges from about 756.0 feet to 756.6 feet.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2012

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 11.3	\$ 10.7
Other Construction Elements:	\$ 0.9	\$ 1.1
Engineering:	\$ 2.3	\$ 1.3
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 14.5</b>	<b>\$ 13.1</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

The current estimate is the actual let amount.

## Project Risks

The project was constructed in 2014 and project risks were retired.

## Schedule

Environmental Approval Date: 01/17/2014  
 Municipal Consent Approval Date: 08/12/2013  
 Geometric Layout Approval Date: 06/28/2013  
 Construction Limits Established Date: 06/28/2013  
 Original Letting Date: 04/25/2014  
 Current Letting Date: 04/11/2014  
 Construction Season: 2014  
 Estimated Substantial Completion: Fall 2014



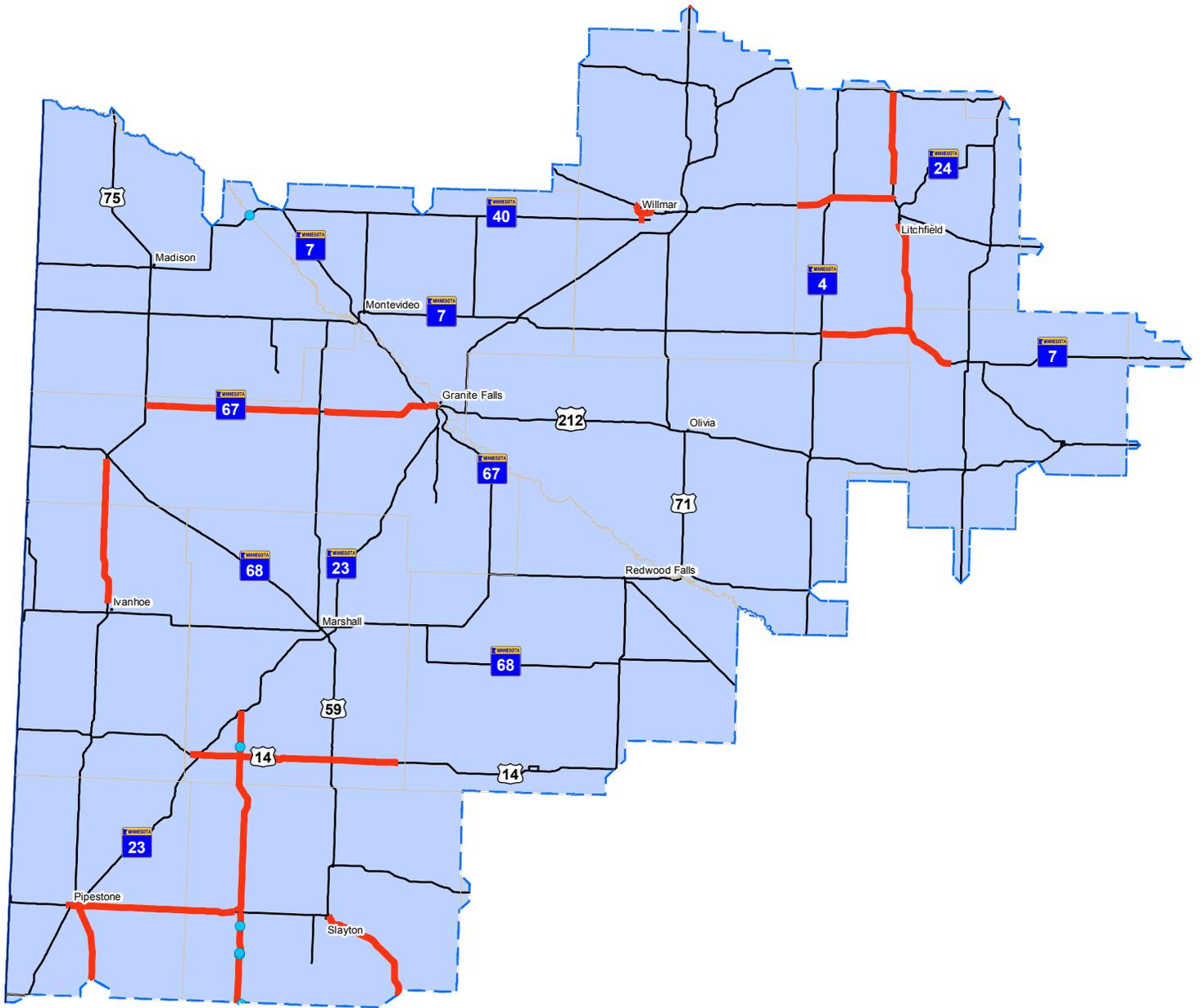
Minnesota Department of Transportation  
 District 7  
 2151 Bassett Drive  
 (507) 304-6100

**District Engineer:** Greg Ous  
**Project Manager:** Zachary Tess

**Revised Date:** 12/15/2016

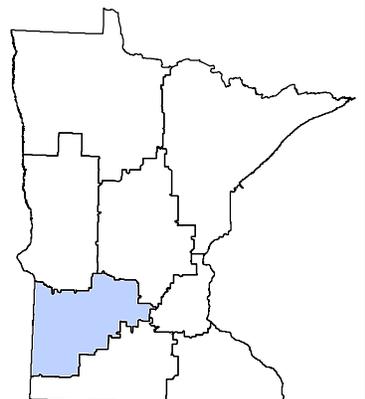
# Major Highway Projects 2017

## D8-WILLMAR



### Major Highway Projects

- Bridge Projects
- Roadway Projects
- State Boundary
- County Line
- Construction District



## District Project Summary

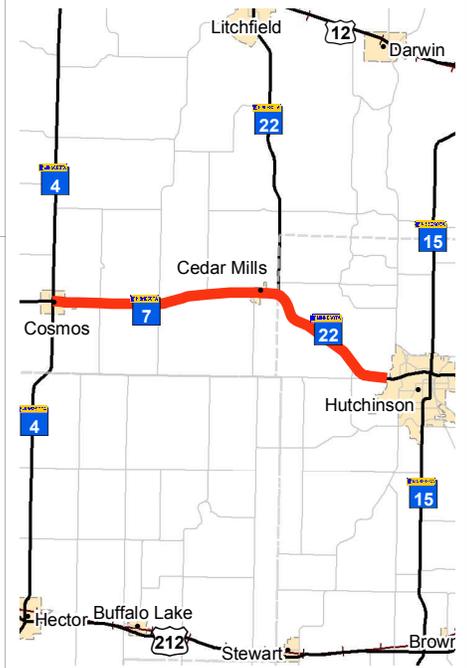
### District 8

Route	State Project #	Project Location	Page
Hwy 7	4703-26	Cosmos to Hutchinson	G 2
Hwy 12	4704-89	4th Street to the south junction of Hwy 22, south of the railroad tracks, in Litchfield	G 3
Hwy 12	4704-47	West Meeker County line to Hwy 22	G 4
Hwys 12 & 40	3403-74	Hwy 12 - E. of Twp. 26 to E. of CSAH 55; Hwy 40 - W. of CSAH 55 to W. of CSAH 5	G 5
Hwy 14	4201-41	Florence to Tracy	G 6
Hwy 22	4710-27	Just north of Hwy 12 to Hwy 55 in Eden Valley	G 7
Hwy 22	4308-34	From the junction of Hwy 7 to the south edge of Litchfield	G 8
Hwy 23	4206-22	Interstate 90 to Willmar	G 9
Hwy 30 & 75	5101-15	Pipestone; Hwy 30 in town, Hwy 30 east, and Hwy 75 south	G 10
Hwy 40	1209-22	3 miles west of Milan	G 11
Hwy 59	5104-39	From Hwy 62 at Fulda to the south junction of Hwy 30 at Slayton	G 12
Hwy 75	4109-29	Hwy 19 in Ivanhoe to Canby	G 13
Hwy 91	5108-12	Hwy 30 in Lake Wilson to Hwy 23	G 14
Hwy 91	5107-14	Murray/Nobles County Line to MN30 (Lake Wilson)	G 15
Hwy 212	8705-18	West of Clarkfield and Clarkfield to Granite Falls	G 16

# PROJECT SUMMARY

Hwy 7  
 Cosmos to Hutchinson  
 Bridge NA  
 State Project No. 4703-26  
<http://www.dot.state.mn.us/d8/projects/hwy7and22/index.html>

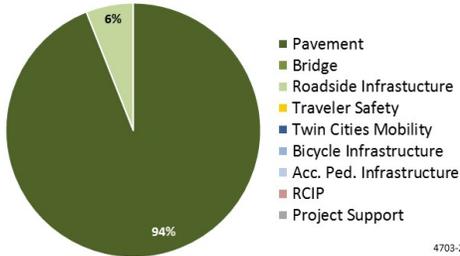
**Substantially Complete**



## Primary Purpose

Performance-based Need: Pavement

## Investment Category



4703-26

## Project Description

This project is a mill and overlay of approximately 16 miles from the city of Cosmos to Hutchinson. It also includes 2 miles of bituminous replacement near the bridges.

## Recent Changes and Updates

REMOVE FROM REPORT THIS YEAR.

Construction on this project is complete.

## Project History

This project was tied to two other adjoining projects for letting. The current estimate was updated to reflect the actual tied letting amount for all three of the projects.

This roadway has deteriorated pavement, resulting in a rough ride and high maintenance costs. The project will strengthen pavement, improve ride quality, and reduce maintenance costs.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2013

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 5.7	\$ 7.1
Other Construction Elements:	\$ 0.3	\$ 0.1
Engineering:	\$ 1.2	\$ 1.4
Right of Way:	\$ 0.0	\$ 0.1
<b>Total:</b>	<b>\$ 7.2</b>	<b>\$ 8.6</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

Current Construction Letting estimate is the awarded cost for the project. Other Construction Elements of \$0.1 million is for unknown costs, such as incentives, Supplemental Agreements, and overruns. Engineering estimates reflect 20 percent of construction letting.

## Project Risks

No significant project risks.

## Schedule

Environmental Approval Date: 11/15/2010  
 Municipal Consent Approval Date: NA  
 Geometric Layout Approval Date: Not needed  
 Construction Limits Established Date: NA  
 Original Letting Date: 02/27/2009  
 Current Letting Date: 12/20/2013  
 Construction Season: 2014  
 Estimated Substantial Completion: Fall 2014



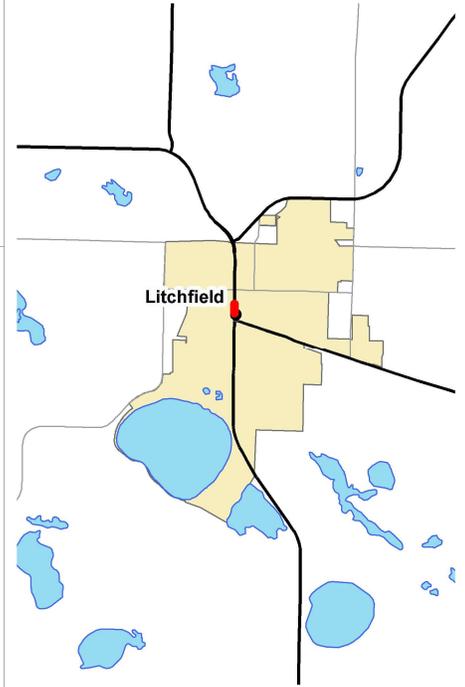
Minnesota Department of Transportation  
 District 8  
 2505 Transportation Road  
 (320) 231-5195

**District Engineer:** Jon Huseby  
**Project Manager:** Kelly Brunkhorst

**Revised Date:** 12/15/2016

## PROJECT SUMMARY

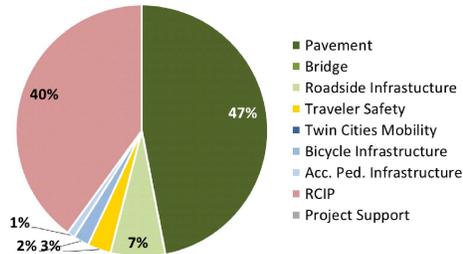
Hwy 12  
4th Street to the south junction of Hwy 22, south of the railroad tracks, in  
Litchfield  
Bridge NA  
State Project No. 4704-89



### Primary Purpose

Performance-based Need: Pavement

### Investment Category



### Project Description

This project is a reconstruction project through downtown Litchfield, with a distance of approximately 1/3 mile.

### Recent Changes and Updates

The District hired a consultant to assist with the development of this project. Over the last year, the project progressed through the project development process, while continuing to work with the city and continuing public outreach. Costs were updated to reflect the current estimate.

### Project History

From October 2015 to April 2016, the District, with the assistance of a consultant, conducted a robust public engagement process to determine what the Litchfield community wanted out of a downtown reconstruction project. Currently this project is progressing through the project development phases and there will be continued public involvement from design through construction.

The letting for this project was moved up several months to provide more time in construction for this large and complex project.

2015 was the first year in the report.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2014

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 3.7	\$ 7.1
Other Construction Elements:	\$ 0.2	\$ 0.2
Engineering:	\$ 0.6	\$ 0.6
Right of Way:	\$ 0.0	\$ 0.1
<b>Total:</b>	<b>\$ 4.5</b>	<b>\$ 8.0</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

The cost estimate includes many of the risks described below.

### Project Risks

This project has many risks inherent with the reconstruction in an urban commercial setting, including: unknown utility issues, historical buildings, uncertain pedestrian improvement (ADA) needs, and potential for hazardous materials.

### Schedule

Environmental Approval Date: Pending Approval  
Municipal Consent Approval Date: Pending Approval  
Geometric Layout Approval Date: Pending Approval  
Construction Limits Established Date: Pending Approval  
Original Letting Date: 03/22/2019  
Current Letting Date: 11/16/2018  
Construction Season: 2019  
Estimated Substantial Completion: Fall 2019



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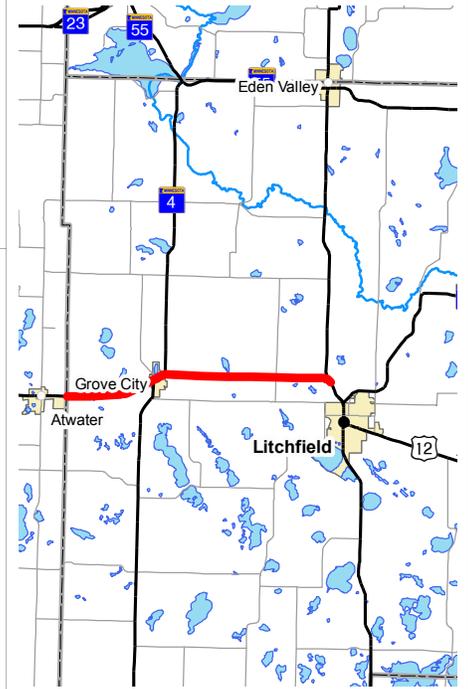
District Engineer: Jon Huseby  
Project Manager: Lowell Flaten

Revised Date: 12/15/2016

## PROJECT SUMMARY

Hwy 12  
West Meeker County line to Hwy 22  
Bridge NA  
State Project No. 4704-47

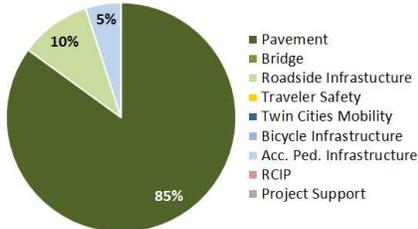
**Substantially Complete**



### Primary Purpose

Performance-based Need: Pavement

### Investment Category



### Project Description

This is an alternate bid project for a bituminous reclamation. The project is approximately 11 miles in length and will include some minor culvert repairs.

### Recent Changes and Updates

The project was completed in September 2015.

### Project History

Construction on this project is to be completed in fall 2015. The current estimate was updated to reflect the actual letting cost of the project.

The project was increased from a short term to a longer term fix as a part of a statewide effort to increase investment on pavement for principal arterials in order to improve the long-term condition of the system. This is reflected in the higher current estimate. Funding for the increased scope was provided through the Statewide Performance Program.

This project was identified because of rough riding pavement and the deteriorating condition of the underlying structure, which resulted in higher maintenance costs. This project will provide long-term improvement to the ride condition and stabilize the underlying structure, resulting in reduced maintenance costs.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2015

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 2.0	\$ 5.9
Other Construction Elements:	\$ 0.1	\$ 0.1
Engineering:	\$ 0.4	\$ 1.2
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 2.5</b>	<b>\$ 7.2</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

Current Construction Letting estimate is the awarded cost for the project. Other Construction Elements of \$0.1 million is for unknown costs, such as incentives, Supplemental Agreements, and overruns. Engineering estimates reflect 20 percent of construction letting.

### Project Risks

No significant project risks remain.

### Schedule

Environmental Approval Date: 07/16/2014  
Municipal Consent Approval Date: NA  
Geometric Layout Approval Date: Not needed  
Construction Limits Established Date: NA  
Original Letting Date: 11/21/2014  
Current Letting Date: 11/21/2014  
Construction Season: 2015  
Estimated Substantial Completion: Fall 2015



Minnesota Department of Transportation  
District 8  
2505 Transportation Road  
(320) 231-5195

**District Engineer:** Jon Huseby  
**Project Manager:** Kelly Brunkhorst  
**Revised Date:** 12/15/2016

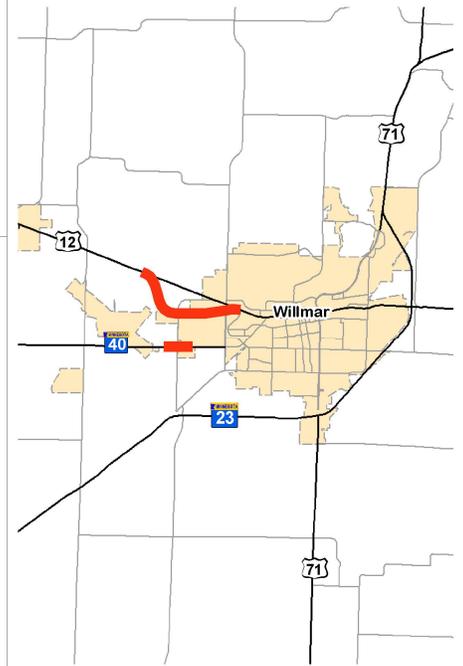
## PROJECT SUMMARY

Hwys 12 & 40

Hwy 12 - E. of Twp. 26 to E. of CSAH 55; Hwy 40 - W. of CSAH 55 to W. of CSAH 5

Bridge NA

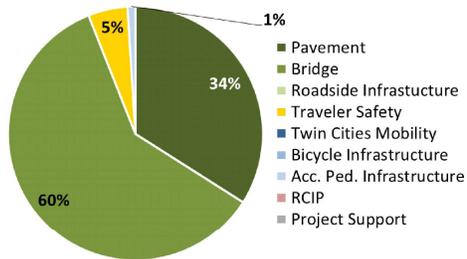
State Project No. 3403-74



### Primary Purpose

Regional and Community Improvement Priority. This project was partially funded through a federal TIGER grant.

### Investment Category



### Project Description

This is a collaborative project between MnDOT, BNSF, the City of Willmar, Kandiyohi County and the city of Willmar's Economic Development Commission. The project will create a rail connection between two existing BNSF railway lines and modify surrounding roadways to better move freight through the city of Willmar. A portion of US Hwy 12 will be reconstructed from 0.1 miles east of township road 26 to 0.6 miles east of CSAH 55. A bridge for Hwy 12 traffic will also be added over the new rail line. A portion of MN Hwy 40 will be reconstructed 0.3 miles west of CSAH 55 to 0.7 miles west of CSAH 5 and a new bridge for Hwy 40 traffic will be added over the new rail line.

### Recent Changes and Updates

Several of the key permits and agreements needed for the project were attained or are approaching completion. The primary partnership (State, City, County and BNSF) agreement for the project, the "Master Cooperative Agreement", is being negotiated, and is nearing its final draft stage. Extra geotechnical monitoring will be used in the construction process to minimize risk of instability. Risks remain for the unknown source(s) and costs of borrow material for the project. The design-build RFP will also allow for geotechnical innovation to mitigate potential soils risks. Construction is expected to take place from 2018 through 2021 for the highway portion of the project.

### Project History

There are several agreements that still need to be negotiated. This project will require a large quantity of borrow dirt and the area in which this project is located does not have an obvious borrow site. The price of the borrow dirt could change dramatically depending on how far away from the project it hauled from. We are currently working on the soils investigation. The results of this investigation will likely show some poor soils.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2016

	Baseline Est.	Current Est.
Construction Letting:	\$ 36.2	\$ 36.2
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 3.0	\$ 3.0
Right of Way:	\$ 2.5	\$ 2.5
<b>Total:</b>	<b>\$ 41.7</b>	<b>\$ 41.7</b>

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

### Key Cost Estimate Assumptions

Assumptions for the construction letting include:

- 1) Alternative 2B will be chosen
- 2) \$20.2 million Rail road costs and \$16 million Roadway Costs
- 3) Includes 15% of the roadway costs for Design-Build

Assumptions for engineering/consultant costs include:

- 1) 8% of the total letting cost to cover Preliminary Design of the Roadway and Preliminary and Final Design of the Railroad

### Project Risks

Given that this project is a public/private partnership, there are several major risks inherent to the project related to the public private partnership between MnDOT, Kandiyohi County, The City of Willmar and BNSF Railway.

### Schedule

Environmental Approval Date: 5/4/17  
 Municipal Consent Approval Date: Not needed  
 Geometric Layout Approval Date: Pending approval  
 Construction Limits Established Date: Pending approval  
 Original Letting Date: 10/19/2017  
 Current Letting Date: 12/13/17  
 Construction Season: 2018  
 Estimated Substantial Completion: 2021



Minnesota Department of Transportation  
 District 8  
 2505 Transportation Road  
 (320) 231-5195

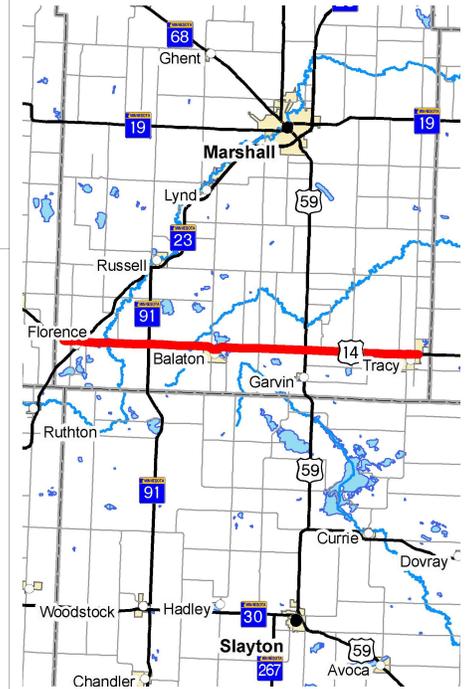
District Engineer: Jon Huseby  
 Project Manager: Paul Rasmussen

Revised Date: 12/15/2016

# PROJECT SUMMARY

Hwy 14  
 Florence to Tracy  
 Bridge NA  
 State Project No. 4201-41  
<http://www.dot.state.mn.us/d8/projects/hwy14florence/index.html>

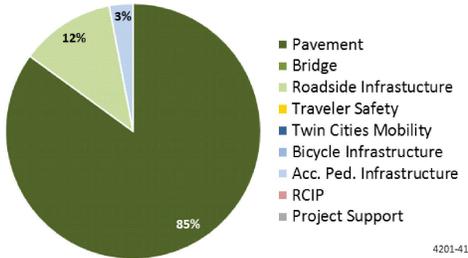
**Substantially Complete**



## Primary Purpose

Performance-based Need: Pavement

## Investment Category



## Project Description

This project is approximately 20 miles of bituminous overlay from Florence to Tracy. The project also includes a mill and overlay in Balaton.

## Recent Changes and Updates

This project was completed in June 2015 and the road is now open to traffic.

## Project History

Completion of this project was delayed due to soils not settling as quickly as expected for flood mitigation associated with the project. The roadway is currently open to traffic and construction will be complete in the fall 2015.

The current cost estimate reflects the actual awarded costs for the projects tied to SP 4201-41. The project was tied to adjoining work for letting, which was SP 4201-90 for flood mitigation near Florence. The current estimate was updated to reflect the actual tied letting amount for the multiple projects.

This project was tied to an adjoining project for letting.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2013

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 3.5	\$ 5.2
Other Construction Elements:	\$ 0.1	\$ 0.7
Engineering:	\$ 0.7	\$ 1.0
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 4.3</b>	<b>\$ 6.9</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

The current estimate was updated to reflect the actual tied letting amount for the two projects. Includes a 1.5 mile stretch of full depth bituminous replacement. Current Construction Letting estimate is the awarded cost for the project. Engineering estimate reflects 20 percent of construction letting. Planning level estimate type.

## Project Risks

No significant risks remain.

## Schedule

Environmental Approval Date: 03/18/2013  
 Municipal Consent Approval Date: NA  
 Geometric Layout Approval Date: Not needed  
 Construction Limits Established Date: NA  
 Original Letting Date: 11/22/2013  
 Current Letting Date: 11/22/2013  
 Construction Season: 2014  
 Estimated Substantial Completion: Fall 2015



Minnesota Department of Transportation  
 District 8  
 2505 Transportation Road  
 (320) 231-5195

District Engineer: Jon Huseby  
 Project Manager: Lowell Flaten

Revised Date: 12/15/2016

# PROJECT SUMMARY

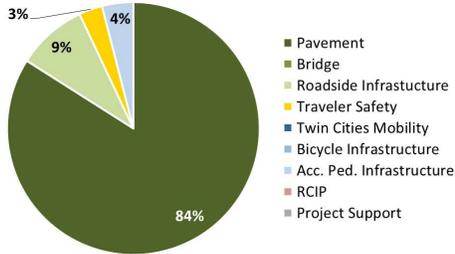
Hwy 22  
 Just north of Hwy 12 to Hwy 55 in Eden Valley  
 Bridge NA  
 State Project No. 4710-27  
 NA



## Primary Purpose

Performance-based Need: Pavement

## Investment Category



## Project Description

This project includes a 1-inch ultra-thin overlay and sealcoat on Hwy 22 from just north of Hwy 12 to Hwy 55 in Eden Valley.

The project is approximately 12 miles in length. Approximately 10 pedestrian ramps and 21 driveways will be upgraded to meet ADA standards in Eden Valley.

## Recent Changes and Updates

The scope has been reduced from a thick overlay to a 1-inch ultra-thin overlay and sealcoat to better meet the performance needs of this pavement. All cost estimates were updated to reflect the change in scope. This project is moving through the project development process. Environmental documents, geometric layout and construction limits have all been approved since last year's report and have been updated below.

## Project History

The total project cost estimate was updated to reflect that the project moved ahead two years.

This project was advanced from 2020 to 2018. 2015 was the first year in the report.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2015

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 5.3	\$ 2.7
Other Construction Elements:	\$ 0.1	\$ 0.1
Engineering:	\$ 0.9	\$ 0.5
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 6.3</b>	<b>\$ 3.3</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

Engineering estimates reflect 20% of construction letting. This project does have right of way costs, but they are expected to be less than \$0.1 million.

## Project Risks

No known significant project risks. Pedestrian improvements in the urban section may incur costs for unknown issues.

## Schedule

Environmental Approval Date: 06/6/17  
 Municipal Consent Approval Date: Not Needed  
 Geometric Layout Approval Date: 9/23/16  
 Construction Limits Established Date: 9/23/16  
 Original Letting Date: 02/23/2018  
 Current Letting Date: 02/23/2018  
 Construction Season: 2018  
 Estimated Substantial Completion: Fall 2018



Minnesota Department of Transportation  
 District 8  
 2505 Transportation Road  
 (320) 231-5195

**District Engineer:** Jon Huseby  
**Project Manager:** Kelly Brunkhorst  
**Revised Date:** 12/15/2016

## PROJECT SUMMARY

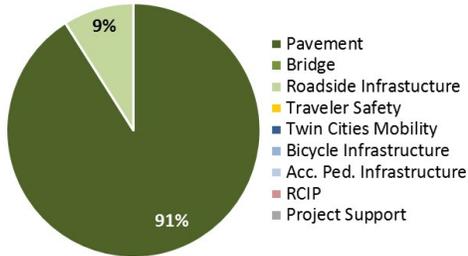
Hwy 22  
From the junction of Hwy 7 to the south edge of Litchfield  
Bridge NA  
State Project No. 4308-34  
NA



### Primary Purpose

Performance-based Need: Pavement

### Investment Category



### Project Description

This project is a thick overlay of approximately 12 miles of Hwy 22 between the west junction of Hwy 7 to the southern limits of the city of Litchfield.

### Recent Changes and Updates

This project was recently let and the environmental documentation was approved and updated below since last year's report. All cost estimates were updated with the letting costs.

### Project History

The environmental documentation for this project is now complete.

The total project cost estimate was reduced due to updated inflation factors.

This segment was identified as having rough riding pavement and deteriorating condition of the underlying structure, resulting in high maintenance costs. This project's purpose is to provide long-term improvements to the ride condition and stabilize the structure, resulting in reduced maintenance costs.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2013

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 6.0	\$ 5.2
Other Construction Elements:	\$ 0.1	\$ 0.2
Engineering:	\$ 1.1	\$ 1.0
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 7.2</b>	<b>\$ 6.4</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

Engineering estimates reflect 20 percent of construction letting. The cost estimates shown reflects the Letting cost.

### Project Risks

There are currently no outstanding risks on this project.

### Schedule

Environmental Approval Date: 12/12/16  
Municipal Consent Approval Date: Not needed  
Geometric Layout Approval Date: June 2015  
Construction Limits Established Date: Not needed  
Original Letting Date: 01/27/2017  
Current Letting Date: 01/27/2017  
Construction Season: 2017  
Estimated Substantial Completion: Fall 2017



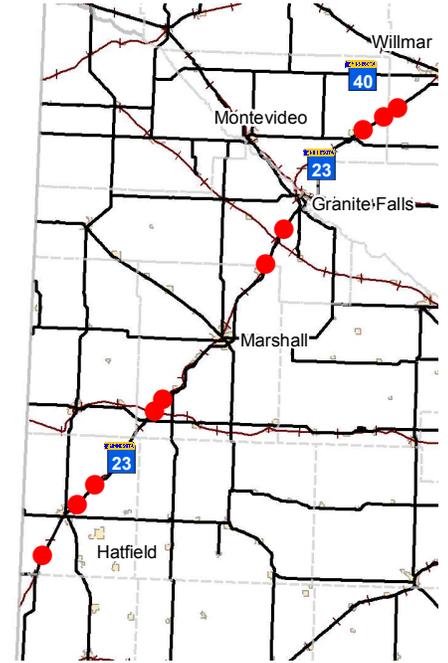
Minnesota Department of Transportation  
District 8  
2505 Transportation Road  
(320) 231-5195

**District Engineer:** Jon Huseby  
**Project Manager:** Kelly Brunkhorst  
**Revised Date:** 12/15/2016

## PROJECT SUMMARY

Hwy 23  
 Interstate 90 to Willmar  
 Bridge NA  
 State Project No. 4206-22  
<http://www.dot.state.mn.us/d8/projects/hwy23passinglanes/>

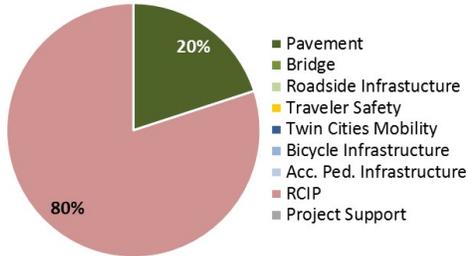
**Substantially Complete**



### Primary Purpose

Performance-based Need: Interregional Corridor Mobility

### Investment Category



### Project Description

This project includes the construction of passing lane segments along Highway 23 between Interstate 90 and Willmar.

### Recent Changes and Updates

This project was completed in the fall of 2016.

### Project History

Construction on the south set of passing lanes was completed in August 2016.

Construction on the north set of passing lanes is expected to be complete by October 2016.

For construction purposes, this project was split into two projects. Due to the location of the parallel railroad line and two townships that are unwilling to close township roads, two of the passing lanes were impacted, but will still be built.

The current cost estimate is based on the current level of design, which is about 75% to 100% complete, for the two projects. This project was identified for the Corridors of Commerce program to provide additional highway capacity and improve the movement of freight and reduce barriers to commerce. An assessment of the corridor, as well as input gathered from a manufacturer's perspective study, resulted in selecting locations spread along the corridor, to provide the biggest benefit.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2013

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 10.3	\$ 12.6
Other Construction Elements:	\$ 1.0	\$ 0.4
Engineering:	\$ 1.7	\$ 2.5
Right of Way:	\$ 1.6	\$ 0.0
<b>Total:</b>	<b>\$ 14.6</b>	<b>\$ 15.5</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

Engineering estimates reflect 20 percent of construction letting.

### Project Risks

The risks were retired.

### Schedule

Environmental Approval Date: 6/01/2015  
 Municipal Consent Approval Date: NA  
 Geometric Layout Approval Date: 06/01/2015  
 Construction Limits Established Date: 6/1/2015  
 Original Letting Date: 02/26/2016  
 Current Letting Date: 10/23/2015  
 Construction Season: 2016  
 Estimated Substantial Completion: Fall 2016



Minnesota Department of Transportation  
 District 8  
 2505 Transportation Road  
 (320) 231-5195

District Engineer: Jon Huseby  
 Project Manager: Matt Brua

Revised Date: 12/15/2016

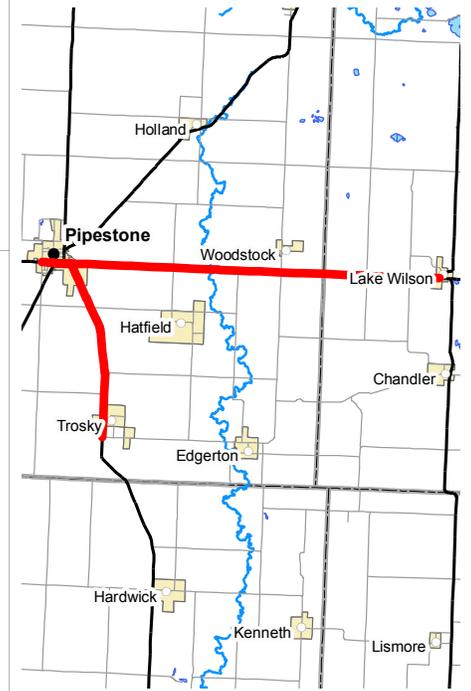
## PROJECT SUMMARY

Hwy 30 & 75

Pipestone; Hwy 30 in town, Hwy 30 east, and Hwy 75 south  
Bridge NA

State Project No. 5101-15, 5903-21, &, 5905-25  
<http://www.dot.state.mn.us/d8/projects/hwy30/index.html> and

Substantially Complete



### Primary Purpose

Performance-based Need: Pavement

### Investment Category

\*This project was designed and scoped before the current highway investment plan MnSHIP was developed, which breaks projects into investment categories.

### Project Description

This project includes a mill and overlay of Hwy 30 in the city of Pipestone. The project also includes an overlay of Hwy 30 between Pipestone and Lake Wilson and an overlay of Hwy 75 from the junction of County Road 9 to Pipestone.

### Recent Changes and Updates

The project was completed in the fall 2015.

### Project History

This project was let, and is expected to be complete in fall 2015.

The City of Pipestone made some utility improvements in advance of this project, which resulted in shortening the west end of project by four blocks in the city of Pipestone. The current cost is the awarded cost for the project that was reduced in length to accommodate the City of Pipestone's need to perform their work.

Three individual projects are being tied together at letting, for better coordination of contractors, staging and to minimize impacts to the public. Tying these three projects together now meets the minimum threshold for inclusion in this report.

This segment was identified as having rough pavement resulting in high maintenance costs. The project's purpose is to improve ride condition and reduce maintenance costs.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2011

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 4.7	\$ 3.3
Other Construction Elements:	\$ 0.3	\$ 0.2
Engineering:	\$ 1.0	\$ 0.7
Right of Way:	\$ 0.1	\$ 0.1
<b>Total:</b>	<b>\$ 6.1</b>	<b>\$ 4.3</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

Current Construction Letting estimate is the awarded cost for the project.  
Engineering estimates reflect 20 percent of construction letting.

### Project Risks

No significant project risks.

### Schedule

Environmental Approval Date: 07/23/2014  
Municipal Consent Approval Date: NA  
Geometric Layout Approval Date: Not needed  
Construction Limits Established Date: NA  
Original Letting Date: 02/27/2015  
Current Letting Date: 01/30/2015  
Construction Season: 2015  
Estimated Substantial Completion: Fall 2015



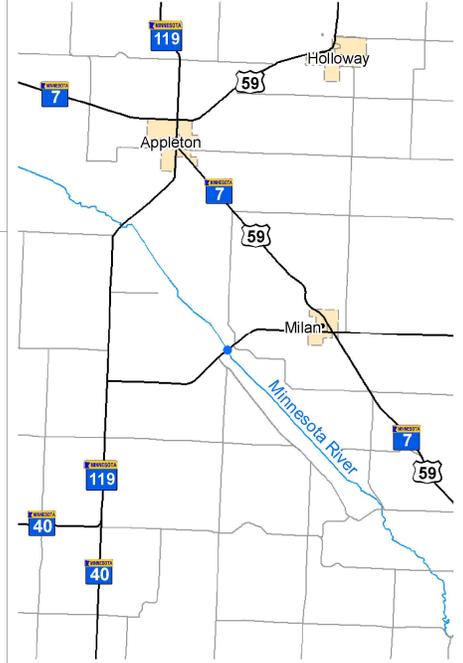
Minnesota Department of Transportation  
District 8  
2505 Transportation Road  
(320) 231-5195

**District Engineer:** Jon Huseby  
**Project Manager:** Lowell Flaten

**Revised Date:** 12/15/2016

## PROJECT SUMMARY

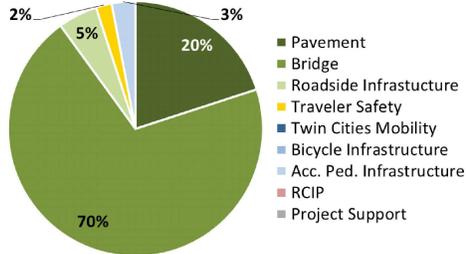
Hwy 40  
 3 miles west of Milan  
 Bridge 5380  
 State Project No. 1209-22  
<http://www.dot.state.mn.us/d8/projects/hwy40-bridge-milan/index.html>



### Primary Purpose

Performance based need: bridge condition

### Investment Category



### Project Description

This project is the replacement of bridge number 5380 over the Minnesota River or Lac qui Parle Lake.

### Recent Changes and Updates

This project is continuing through the project development process, including continuing public outreach.

### Project History

This project recently changed from a bridge rehabilitation to a bridge replacement due to public concerns. The decision to replace the bridge rather than rehabilitate the existing structure was determined through extensive public outreach.

This project was previously a bridge rehabilitation until late 2015, when it changed to a bridge replacement. The 2017-2020 STIP is the first year it is shown as a bridge replacement.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2016

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 5.3	\$ 6.0
Other Construction Elements:	\$ 0.2	\$ 0.2
Engineering:	\$ 1.0	\$ 0.9
Right of Way:	\$ 0.3	\$ 0.3
<b>Total:</b>	<b>\$ 6.8</b>	<b>\$ 7.4</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

Engineering is 20% of construction total and right of way costs are based on previous scopes to replace the bridge in 2009.

### Project Risks

This project will need an Army Corps of Engineer's permit and review through the environmental process, including SHPO concurrence.

### Schedule

Environmental Approval Date: Pending approval  
 Municipal Consent Approval Date: Not needed  
 Geometric Layout Approval Date: Pending approval  
 Construction Limits Established Date: Pending approval  
 Original Letting Date: 3/22/19  
 Current Letting Date: 3/22/19  
 Construction Season: 2019  
 Estimated Substantial Completion: 2019



Minnesota Department of Transportation  
 District 8  
 2505 Transportation Road  
 (320) 231-5195

District Engineer: Jon Huseby  
 Project Manager: Teal Spellman

Revised Date: 12/15/2016

# PROJECT SUMMARY

Hwy 59

From Hwy 62 at Fulda to the south junction of Hwy 30 at Slayton

Bridge NA

State Project No. 5104-39

<http://www.dot.state.mn.us/d8/projects/hwy59/index.html>

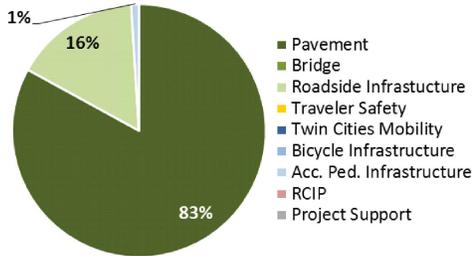
**Substantially Complete**



## Primary Purpose

Performance-based Need: Pavement

## Investment Category



## Project Description

This project is a mill and overlay of approximately 13 miles of Hwy 59 from the junction with Hwy 62 to the south junction of Hwy 30 at Slayton. The project includes pedestrian ramp improvements in the city of Avoca.

## Recent Changes and Updates

This project was completed in August 2015.

## Project History

This project was moved from the 2016 to the 2015 construction season due to stakeholder input and the rapidly deteriorating pavement condition. The current estimate reflects the actual awarded letting cost for the project. The decrease is due to estimate refinements, and the removal of inflationary increases because the project letting was moved two years earlier.

This segment was identified as having rough pavement resulting in high maintenance costs. The project's purpose is to improve ride condition and reduce maintenance costs.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2012

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 4.0	\$ 2.5
Other Construction Elements:	\$ 0.2	\$ 0.1
Engineering:	\$ 0.7	\$ 0.5
Right of Way:	\$ 0.1	\$ 0.0
<b>Total:</b>	<b>\$ 5.0</b>	<b>\$ 3.1</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

This project does have right of way costs, but less than \$0.1 million. Current Construction Letting estimate is the awarded cost for the project. Engineering estimates reflect 20 percent of construction letting.

## Project Risks

No significant project risks remain.

## Schedule

Environmental Approval Date: 11/24/2014  
 Municipal Consent Approval Date: Not needed  
 Geometric Layout Approval Date: 08/22/2014  
 Construction Limits Established Date: 08/22/2014  
 Original Letting Date: 01/22/2016  
 Current Letting Date: 5/15/2015  
 Construction Season: 2015  
 Estimated Substantial Completion: Fall 2015



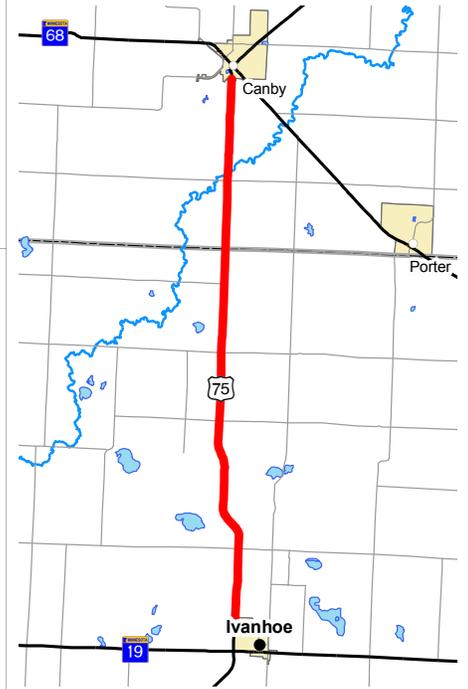
Minnesota Department of Transportation  
 District 8  
 2505 Transportation Road  
 (320) 231-5195

District Engineer: Jon Huseby  
 Project Manager: Lowell Flaten

Revised Date: 12/15/2016

## PROJECT SUMMARY

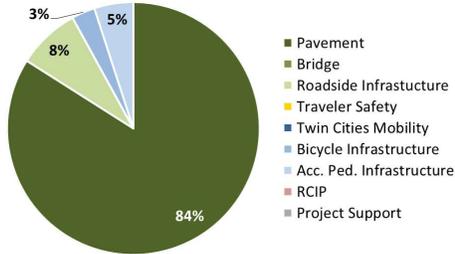
Hwy 75  
Hwy 19 in Ivanhoe to Canby  
Bridge NA  
State Project No. 4109-29  
NA



### Primary Purpose

Performance-based Need: Pavement

### Investment Category



### Project Description

This project is a mill and overlay on Highway 75 and for approximately 17 miles from Hwy 19 in Ivanhoe to Canby, as well as a small portion of Highway 68 in Canby. It also includes the replacement of low-tension guardrail and raising of the approach panel adjacent to the bridge, lining 20 to 30 pipes and replacing five culverts.

### Recent Changes and Updates

The scope of this project has changed to include a portion of Highway 68 for better project coordination. All cost estimates have been updated to reflect the change in scope. This project is continuing to progress through the project development phases.

### Project History

This project is progressing through the project development phases.

2015 was the first year this project appeared in the report.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2015

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 4.6	\$ 5.0
Other Construction Elements:	\$ 0.1	\$ 0.1
Engineering:	\$ 0.8	\$ 0.9
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 5.5</b>	<b>\$ 6.0</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

Engineering estimates reflect 20% of construction letting. This project does have right of way costs, but they are expected to be less than \$0.1 million.

### Project Risks

No known significant project risks.

### Schedule

Environmental Approval Date: Not Complete  
Municipal Consent Approval Date: Not needed  
Geometric Layout Approval Date: Not needed  
Construction Limits Established Date: Not Complete  
Original Letting Date: 03/22/2019  
Current Letting Date: 03/22/2019  
Construction Season: 2019  
Estimated Substantial Completion: Fall 2019



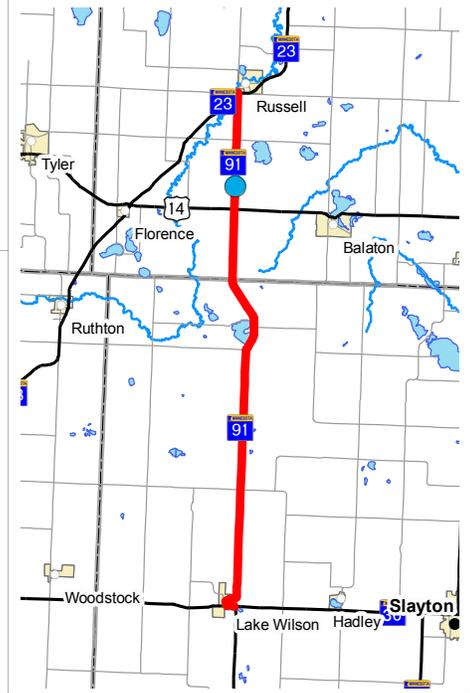
Minnesota Department of Transportation  
District 8  
2505 Transportation Road  
(320) 231-5195

**District Engineer:** Jon Huseby  
**Project Manager:** Kent Medalen

**Revised Date:** 12/15/2016

# PROJECT SUMMARY

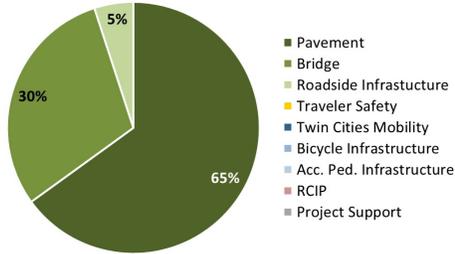
Hwy 91  
 Hwy 30 in Lake Wilson to Hwy 23  
 Bridge 9094  
 State Project No. 5108-12  
 NA



## Primary Purpose

Performance-based Need: Pavement and Bridge Condition

## Investment Category



## Project Description

This project is a mill and overlay of approximately 23 miles from Hwy 30 in Lake Wilson to Hwy 23. It also includes the replacement of Bridge 9094.

## Recent Changes and Updates

This project is progressing through the project development process. The geometric layout and construction limits were approved since last year's report.

## Project History

The total project cost estimate was reduced due to updated inflation factors.

2015 was the first year in the report.

This project is tied with two other 2019 projects on Hwy 91, one of which is in District 7.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2015

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 7.1	\$ 6.0
Other Construction Elements:	\$ 0.2	\$ 0.2
Engineering:	\$ 1.1	\$ 1.0
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 8.4</b>	<b>\$ 7.2</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

Engineering estimates reflect 20% of construction letting. This project does have right of way costs, but they are expected to be less than \$0.1 million.

## Project Risks

No known significant project risks. Relatively minor cost risk for culverts scoped for liners, may need to be replaced. Pedestrian improvements in the urban section may incur costs for unknown issues.

## Schedule

Environmental Approval Date: Pending approval  
 Municipal Consent Approval Date: Not Needed  
 Geometric Layout Approval Date: 8/4/17  
 Construction Limits Established Date: 8/4/17  
 Original Letting Date: 02/22/2019  
 Current Letting Date: 02/22/2019  
 Construction Season: 2019  
 Estimated Substantial Completion: Fall 2019



Minnesota Department of Transportation  
 District 8  
 2505 Transportation Road  
 (320) 231-5195

**District Engineer:** Jon Huseby  
**Project Manager:** Jesse Vlaminck

**Revised Date:** 12/15/2016

## PROJECT SUMMARY

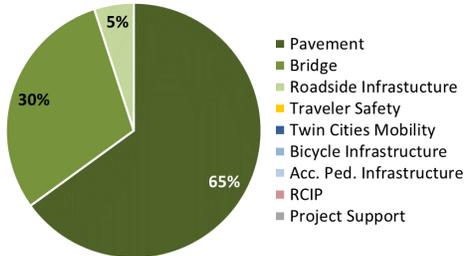
Hwy 91  
Murray/Nobles County Line to MN30 (Lake Wilson)  
Bridge 6753, 6754, 8759  
State Project No. 5107-14  
NA



### Primary Purpose

Performance-based need: Pavement Condition

### Investment Category



### Project Description

This project is a mill and overlay of Hwy 91 from Hwy 30 in Lake Wilson to Hwy 23 near Russell. The project also includes a bridge replacement (bridge #6782) over the Des Moines River.

### Recent Changes and Updates

This project is continuing to progress through the project development process. The geometric layout and construction limits have been approved since last year's report.

### Project History

The project is progressing through the project development phases. The total project cost estimate was reduced due to updated inflation factors.

2016 was the first year in the report.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2015

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 4.3	\$ 4.1
Other Construction Elements:	\$ 0.1	\$ 0.1
Engineering:	\$ 0.7	\$ 0.6
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 5.1</b>	<b>\$ 4.8</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

This project does have right of way costs, but less than \$0.1 million.

### Project Risks

No significant project risks.

### Schedule

Environmental Approval Date: Pending approval  
Municipal Consent Approval Date: Not Needed  
Geometric Layout Approval Date: 8/4/17  
Construction Limits Established Date: 8/4/17  
Original Letting Date: 2/22/2019  
Current Letting Date: 2/22/2019  
Construction Season: 2020  
Estimated Substantial Completion: Fall 2019



Minnesota Department of Transportation  
District 8  
2505 Transportation Road  
(320) 231-5195

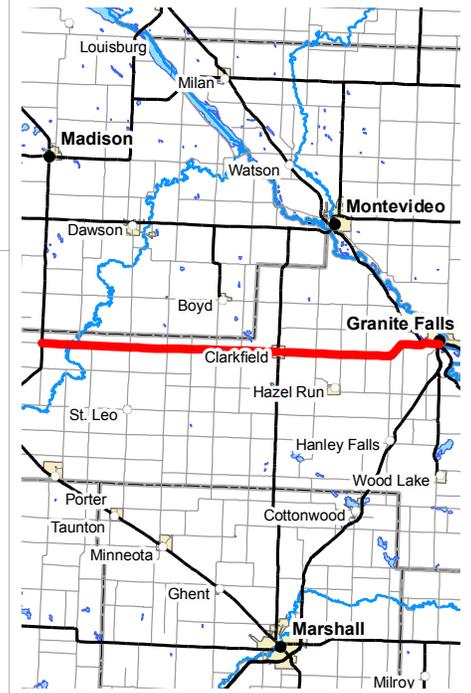
**District Engineer:** Jon Huseby  
**Project Manager:** Jesse Vlamincik

**Revised Date:** 12/15/2016

## PROJECT SUMMARY

Hwy 212  
West of Clarkfield and Clarkfield to Granite Falls  
Bridge NA  
State Project No. 8705-18, 8706-23, & 8712-31  
<http://www.dot.state.mn.us/d8/projects/hwy67-212/index.html>

Substantially Complete



### Primary Purpose

Performance-based Need: Pavement

### Investment Category

\*This project was designed and scoped before the current highway investment plan MnSHIP was developed, which breaks projects into investment categories.

### Project Description

This project includes a mill and overlay of Hwy 67 from the junction with Hwy 75 to Granite Falls (excluding the city of Clarkfield) and a mill and overlay of Hwy 212 in Granite Falls

### Recent Changes and Updates

Construction was completed in October of 2015.

### Project History

These tied projects were let.

The current estimate reflects the awarded cost of the tied letting. The difference in cost can be attributed to better bid costs due to the economy of scale offered by the combined projects, and the previous estimate being the result of additive rounding (up) errors inherent in the three individual estimates, combined into one.

Three individual projects are being tied together at letting, for better coordination of contractors, staging and to minimize impacts to the public. Tying these three projects together now meets the minimum threshold for inclusion in this report.

This segment was identified as having rough pavement resulting in high maintenance costs. The project's purpose is to improve ride condition and reduce maintenance costs.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2011

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 7.1	\$ 5.6
Other Construction Elements:	\$ 0.3	\$ 0.1
Engineering:	\$ 1.2	\$ 1.1
Right of Way:	\$ 0.1	\$ 0.1
<b>Total:</b>	<b>\$ 8.7</b>	<b>\$ 6.9</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

Current Construction Letting estimate is the awarded cost for the project. Other Construction Elements of \$0.1 million is for unknown costs, such as incentives, Supplemental Agreements, and overruns. Engineering estimates reflect 20 percent of construction letting.

### Project Risks

No significant project risks.

### Schedule

Environmental Approval Date: 07/23/2014  
Municipal Consent Approval Date: Not needed  
Geometric Layout Approval Date: Not needed  
Construction Limits Established Date: Not needed  
Original Letting Date: 01/30/2015  
Current Letting Date: 01/30/2015  
Construction Season: 2015  
Estimated Substantial Completion: Fall 2015

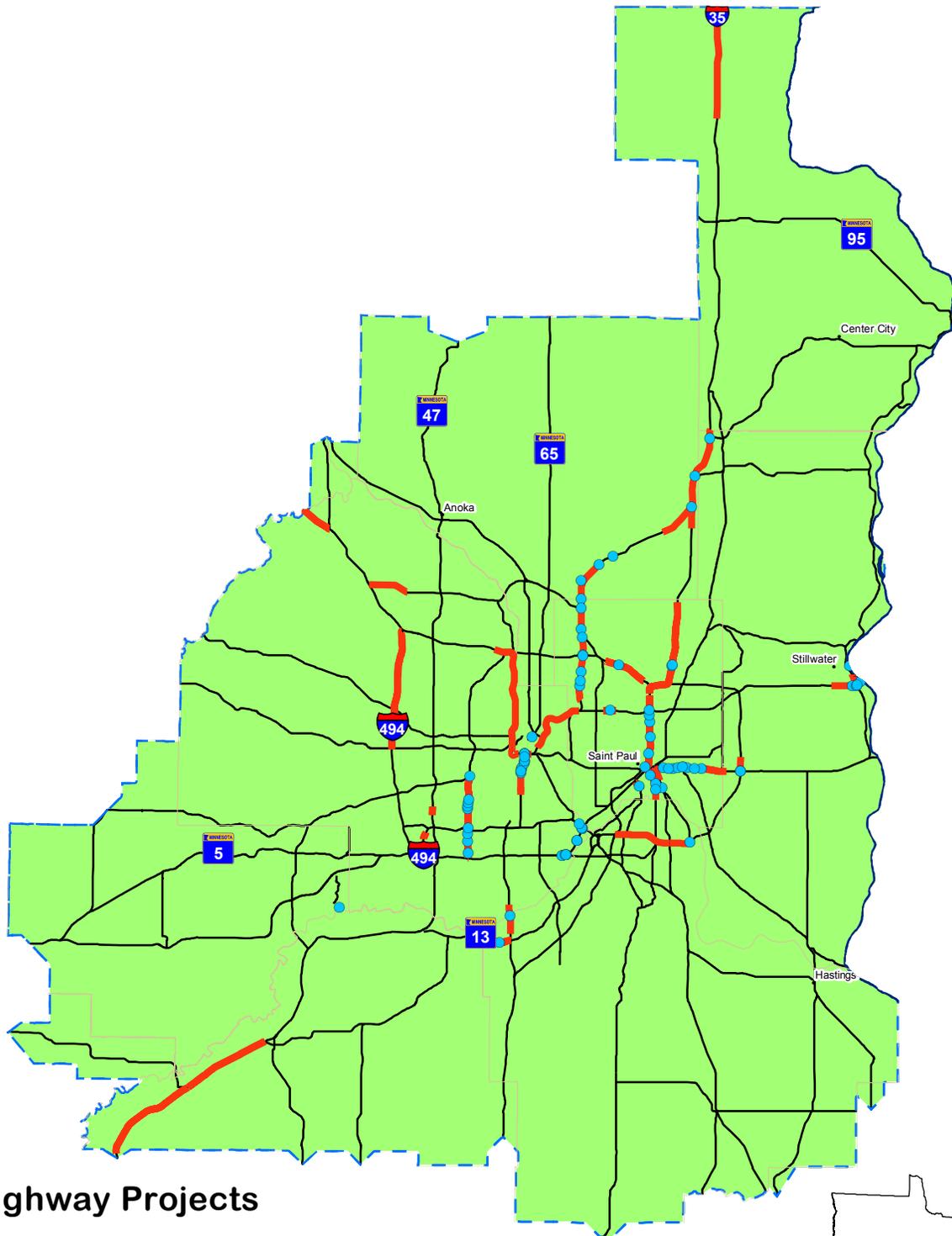


Minnesota Department of Transportation  
District 8  
2505 Transportation Road  
(320) 231-5195

**District Engineer:** Jon Huseby  
**Project Manager:** Bill Knofczynski

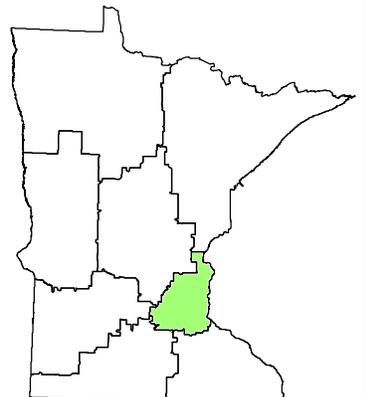
**Revised Date:** 12/15/2016

# Major Highway Projects 2017 D-METRO



## Major Highway Projects

-  Bridge Projects
-  Roadway Projects
-  State Boundary
-  County Line
-  Construction District



## District Project Summary

### District Metro

Route	State Project #	Project Location	Page
Hwy 65	2710-47	Minneapolis	H 2
I-35	1380-84	Harris to Chisago-Pine county line	H 3
I-35W	2782-347	Minneapolis	H 4
I-35W	2783-166	Minneapolis, Roseville	H 5
I-694	8286-81	Oakdale/Woodbury	H 6
Hwy 5	2732-105	Hwy 5/I-494 Jct to south end of MN River bridge	H 7
Hwy 10	0202-95	Hwy 10 at County Road 83 (Armstrong Blvd) interchange	H 8
Hwy 13	1901-148	County Road 5 in Burnsville	H 9
Hwy 36	6212-148	Lexington Ave bridge over Hwy 36 in Roseville	H 10
Hwy 36	8221-01	Oak Park Heights, Stillwater and Bayport	H 11
Hwy 52	6244-30	Lafayette River Bridge over Mississippi River in St. Paul	H 12
Hwy 100	2733-89	St. Louis Park	H 13
Hwy 149	6223-20	Smith Avenue High Bridge over the Mississippi River in St. Paul	H 14
Hwy 169	2772-113	Nine Mile Creek Bridge (Hopkins, Edina, Minnetonka)	H 15
Hwy 169	7007-34	Hwy 19 to Ash St in Belle Plaine	H 16
Hwy 169	7008-111	Scott County, from Hwy 25 in Belle Plaine to Hwy 282 in Jordan	H 17
Hwy 610	2771-37	Hwy 81 to I-94 in Maple Grove	H 18
Hwy 952A (Robert St)	6217-43	Robert St, from Annapolis St to 12th St. in St. Paul	H 19
I-35	8280-47	Washington, Anoka Counties	H 20
I-35E	6281-47	Little Canada Rd in Little Canada to Lino Lakes	H 21
I-35E	6280-308	Cayuga Bridge between University Ave and Maryland Ave	H 22
I-35E	6280-367	I-35E between Pennsylvania Ave and Little Canada Road	H 23
I-35E	6281-25	Vadnais Heights and White Bear Lake - Goose Lake Road Bridges	H 24
I-35W	6284-180	Roseville to Hwy 10	H 25
I-35W	2782-327	43rd Street to I-94 Commons	H 26
I-35W	1981-124	Minnesota River Crossing (Bloomington and Burnsville)	H 27
I-94	6283-234	I-94 (Mounds Blvd to Hwy 120) and Hwy 61 (Burns Avenue to Hwy 5)	H 28
I-94	2781-432	Nicollet Avenue in Minneapolis to Shingle Creek Bridge in Brooklyn Center	H 29
I-494	2785-330	I-394 in Minnetonka to I-94/494/694 in Maple Grove	H 30
I-494	1985-149	South St Paul to Inver Grove Heights	H 31
I-494	1985-148	South St. Paul to Mendota Heights	H 32
I-694	6285-143	Little Canada to Arden Hills	H 33
Hwy 100	2734-33	36th Street to 25 1/2 Street in St. Louis Park	H 34
Hwy 101	1009-24	Minnesota River Bridge in Shakopee to Hwy 61 in Chanhassen	H 35
Hwy 212	2763-49	At Shady Oak Road in Eden Prairie	H 36

## PROJECT SUMMARY

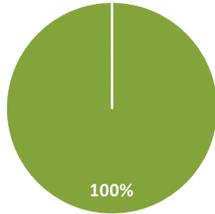
Hwy 65  
 Minneapolis  
 Bridge 2440  
 State Project No. 2710-47  
<http://www.dot.state.mn.us/historicbridges/2440.html>



### Primary Purpose

Performance-based need: Bridge Condition

### Investment Category



- Pavement
- Bridge
- Roadside Infrastructure
- Jurisdictional Transfer
- Facilities
- Traveler Safety
- Greater MN Mobility
- Twin Cities Mobility
- Freight
- Bicycle Infrastructure
- Acc. Ped. Infrastructure
- RCIP
- Project Delivery
- Small Programs

### Project Description

The project rehabilitates the historic 3rd Avenue Bridge (#2440) over the Mississippi River in downtown Minneapolis.

### Recent Changes and Updates

This project is currently being scoped, and a portion of the funding is identified in year 2021 of the 2018-2021 STIP as a Non-NHS Bridge set-aside. Additional inspections are being used to evaluate project cost. The estimated cost in the 2017 MHPR is preliminary and is expected to increase. This project was once planned to be let in 2018, but was pushed back due to the needs of other bridges and lack of funding. The project will be delivered by the Construction Manager/General Contractor method, which is used on complex projects to help save time, reduce risk and foster innovation.

### Project History

The 3rd Avenue Bridge was constructed between 1914 and 1917, as an example of Melan arch construction. With its reverse S-curve alignment and spacing of the arches it was designed to avoid dangerous limestone breaks in the falls which produced an overall image as a gateway to downtown Minneapolis. This is a significant bridge as it is the last major reinforced-concrete Melan arch bridge constructed in the Twin Cities and is a contributing element to the St. Anthony Falls Industrial Historic District.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2017

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 50.0	\$ 50.0
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 7.3	\$ 7.3
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 67.3</b>	<b>\$ 67.3</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

Standard practices were used to develop estimates for this project. The project uses the CMGC delivery method.

### Project Risks

Project risks include additional unknown conditions, CMGC costs, construction access to the bridge, traffic control, the number of construction seasons and historic/cultural resource mitigation.

### Schedule

Environmental Approval Date: pending approval  
 Municipal Consent Approval Date: pending approval  
 Geometric Layout Approval Date: pending approval  
 Construction Limits Established Date: pending approval  
 Original Letting Date: 07/27/2018  
 Current Letting Date: 06/15/2022  
 Construction Season: 2021/2022  
 Estimated Substantial Completion: 01/27/2023



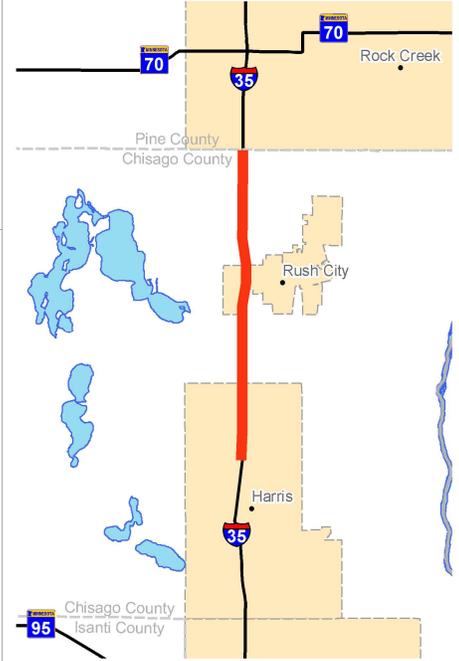
Minnesota Department of Transportation  
 District M  
 1500 West County Road B2  
 (651) 234-7500

**District Engineer:** Scott McBride  
**Project Manager:** Christian Hoberg

**Revised Date:** 12/15/2017

# PROJECT SUMMARY

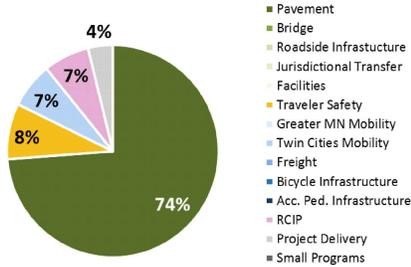
I-35  
 Harris to Chisago-Pine county line  
 Bridge NA  
 State Project No. 1380-84  
 NA



## Primary Purpose

Performance-based need: Pavement Condition

## Investment Category



## Project Description

The project is from I-35 at CSAH 9 near Harris to the Chisago-Pine county line. The project includes an unbonded concrete pavement overlay and stormwater drainage repair.

## Recent Changes and Updates

2017 is the first year this project is included in the Major Highway Projects Report. In the 2018-2021 STIP, this project was included in state fiscal year 2021. This project was identified as a candidate to advance into state fiscal year 2019 for coordination with a District 1 project in Pine County on I-35. Chapter 3 funding from the 2017 Minnesota legislative session may be used to advance the project into SFY2019 pending a STIP amendment in calendar year 2018.

## Project History

The goal of this project is to improve the ride smoothness and restore the pavement structure of this segment to a pavement condition considered to be in the "Good" category for a projected period of 30+ years to help meet MnDOT's pavement performance targets. The project will also include cable medians, drainage repairs to culverts, pipes and aprons.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2018

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 27.1	\$ 27.1
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 4.3	\$ 4.3
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 31.4</b>	<b>\$ 31.4</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

Standard practices were used to develop costs.

## Project Risks

Traffic mitigation and staging accounts for some of the construction letting costs, cost could rise based on the final layout for cross overs. There are bridges in the corridor that currently do not have any needs at this time. There may be more drainage needs as additional information is gathered.

## Schedule

Environmental Approval Date: pending approval  
 Municipal Consent Approval Date: not needed  
 Geometric Layout Approval Date: pending approval  
 Construction Limits Established Date: pending approval  
 Original Letting Date: 7/27/2018  
 Current Letting Date: 12/18/2020  
 Construction Season: 2021  
 Estimated Substantial Completion: 11/15/2021

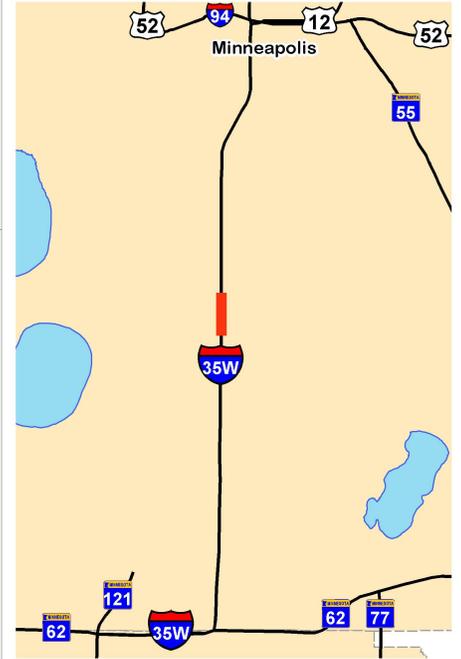


Minnesota Department of Transportation  
 District M  
 1500 West County Road B2  
 (651) 234-7500

District Engineer: **Scott McBride**  
 Project Manager: **Dmitry Tomasevich**  
 Revised Date: 12/15/2017

# PROJECT SUMMARY

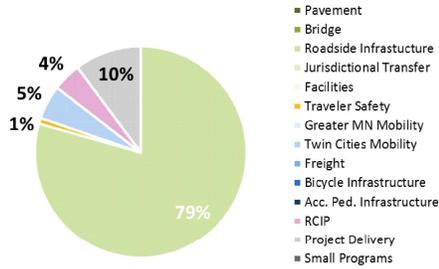
I-35W  
 Minneapolis  
 Bridge NA  
 State Project No. 2782-347  
 NA



## Primary Purpose

Performance based need: Roadside Infrastructure Condition

## Investment Category



## Project Description

Construct a stormwater holding cavern system on I-35W, from 42nd Street to 39th Street in Minneapolis.

## Recent Changes and Updates

2017 is the first year this project is included in the Major Highway Projects Report. This project was split from the larger I-35W/Lake Street project (2782-327) because of the complex nature and design of the stormwater caverns.

## Project History

This project was originally included in the larger I-35W/Lake Street project (SP 2782-327) but due to the complex nature and design of the project, design-build will be used to deliver the project. The flooding at the 42nd Street sag location will be addressed to meet MnDOT Drainage Manual Standards to improve safety and prevent property damage to the surrounding areas.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2018

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 26.7	\$ 26.7
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 0.7	\$ 26.7
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 27.4</b>	<b>\$ 27.4</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

Costs are not inflated to 2020 dollars. Cost estimate does not capture final local contribution.

## Project Risks

Due to the complexities of the stormwater cavern design, design-build delivery will be used. Those costs are not in the baseline estimate. Some traffic mitigation measures to continue from the larger I-35W/Lake St. construction. Costs are likely to increase substantially as additional information on the cavern design and delivery are gathered and analyzed.

## Schedule

Environmental Approval Date: pending approval  
 Municipal Consent Approval Date: pending  
 Geometric Layout Approval Date: pending approval  
 Construction Limits Established Date: pending approval  
 Original Letting Date: 03/23/2018  
 Current Letting Date: 01/24/2020  
 Construction Season: 2020-2021  
 Estimated Substantial Completion: 12/01/2021



Minnesota Department of Transportation  
 District M  
 1500 West County Road B2  
 (651) 234-7500

District Engineer: Scott McBride  
 Project Manager: Nick Olson

Revised Date: 12/15/2017

# PROJECT SUMMARY

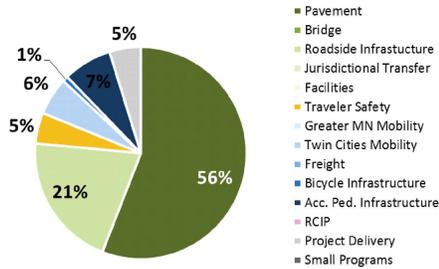
I-35W  
 Minneapolis, Roseville  
 Bridge NA  
 State Project No. 2783-166  
 NA



## Primary Purpose

Performance-based need: Pavement Condition

## Investment Category



## Project Description

The project is a bituminous mill and overlay with ADA improvements along I-35W from 4th Street in Minneapolis to Rosegate in Roseville.

## Recent Changes and Updates

2017 is the first year this project is included in the Major Highway Projects Report.

## Project History

This segment of I-35W has deteriorated quickly since the last concrete pavement repair in 2008. The deterioration has accelerated over the last two seasons, requiring regular night maintenance patching. This project will be completed prior to the I-35W North MnPASS project (SP 6284-180).

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2017

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 16.9	\$ 16.9
Other Construction Elements:	\$ 0.8	\$ 0.8
Engineering:	\$ 3.0	\$ 3.0
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 20.7</b>	<b>\$ 20.7</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

Standard practices were used to develop estimates for this project.

## Project Risks

Risks include local signal work at I-35W and Industrial Blvd, and traffic control measures.

## Schedule

Environmental Approval Date: 07/06/2017  
 Municipal Consent Approval Date: not needed  
 Geometric Layout Approval Date: 08/25/2017  
 Construction Limits Established Date: 08/25/2017  
 Original Letting Date: 6/15/2020  
 Current Letting Date: 04/27/2018  
 Construction Season: 2018  
 Estimated Substantial Completion: 10/01/2018



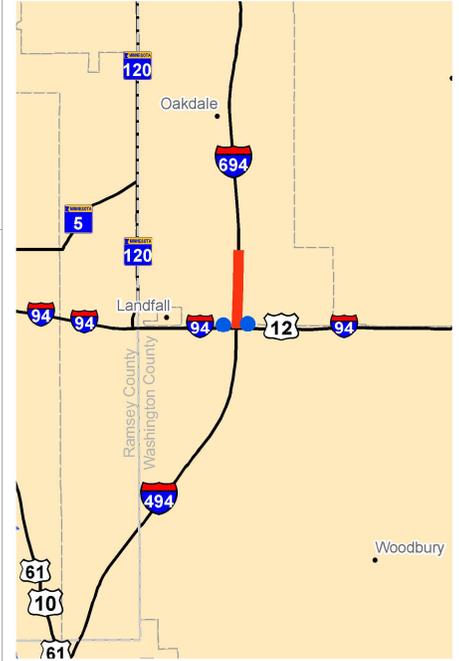
Minnesota Department of Transportation  
 District M  
 1500 West County Road B2  
 (651) 234-7500

District Engineer: **Scott McBride**  
 Project Manager: **Jerome Adams**

Revised Date: 12/15/2017

# PROJECT SUMMARY

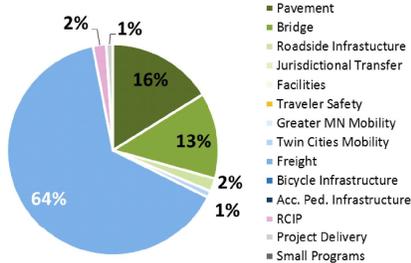
I-694  
 Oakdale/Woodbury  
 Bridge 82831, 82832  
 State Project No. 8286-81  
 NA



## Primary Purpose

Performance-based need: Bridge  
 ConditionPerformance-based need:  
 Pavement Condition

## Investment Category



## Project Description

This project involves constructing the I-694/494/94 system interchange in Oakdale/Woodbury from 10th St (CSAH10) to Tamarack Rd. The project includes a concrete pavement overlay, adding a southbound auxiliary lane from 10th Street to I-94, replacing and widening two bridges-the I-694 bridges over I-94, reconstructing the southwest loop, and median work on the collector-distributor ramp.

## Recent Changes and Updates

2017 is the first year this project is included in the Major Highway Projects Report. The project had once been planned to be let in 2017, but was pushed back into calendar year 2018 due to the upscope related to the freight benefits and funding.

## Project History

In 2017, the project was upscoped from an \$8.7 million bridge project to \$30.2 million (construction costs only) after receiving \$19.5 million in federal freight funding to correct ramps and loops, improve the bridge deck and apply a long-term pavement fix. The federal surface transportation bill, Fixing America's Surface Transportation Act was passed and signed into law in 2015, and provided the additional freight funding.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2017

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 30.2	\$ 30.2
Other Construction Elements:	\$ 1.4	\$ 1.4
Engineering:	\$ 5.6	\$ 5.6
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 37.2</b>	<b>\$ 37.2</b>

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

## Key Cost Estimate Assumptions

Standard practices were used to develop cost estimates for this project.

## Project Risks

The project could be extended into two construction seasons depending on the timing of closing ramps during construction, possible right of way contamination, some local interest in a larger project, possible temporary bridge, and because may not be able to salvage existing bridge pier locations.

## Schedule

Environmental Approval Date: pending  
 Municipal Consent Approval Date: pending  
 Geometric Layout Approval Date: pending approval  
 Construction Limits Established Date: pending approval  
 Original Letting Date: 07/21/2017  
 Current Letting Date: 09/21/2018  
 Construction Season: 2019  
 Estimated Substantial Completion: 11/01/2019



Minnesota Department of Transportation  
 District M  
 1500 West County Road B2  
 (651) 234-7500

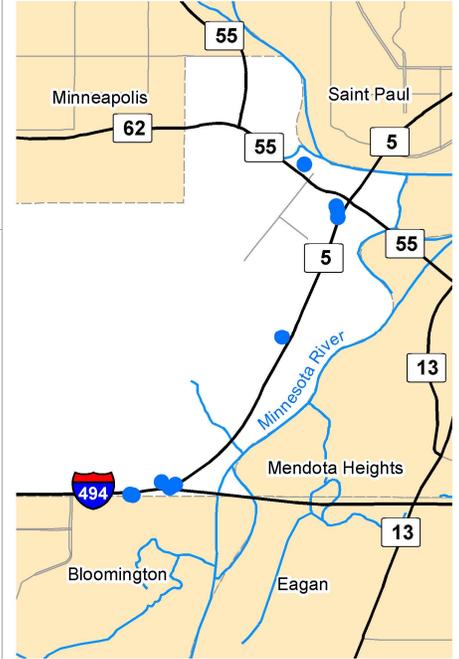
District Engineer: **Scott McBride**  
 Project Manager: **Ryan Coddington**

Revised Date: 12/15/2017

# PROJECT SUMMARY

## Hwy 5

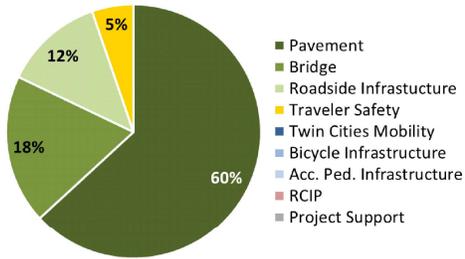
Hwy 5/I-494 Jct to south end of MN River bridge  
 Bridge 27161, 27107, 27118, 27763, 27764, 27766, 27983, 27984, 9153,  
 9154, 9306  
 State Project No. 2732-105



### Primary Purpose

Performance-based need: Pavement  
 Condition Performance-based need: Bridge  
 Condition

### Investment Category



### Project Description

The project includes concrete pavement overlay, cable median barrier and the rehabilitation of 11 bridges.

### Recent Changes and Updates

In 2017, costs for the project increased due to additional engineering and refinement of the construction letting estimate.

### Project History

The project will improve the pavement condition of the road segment on Hwy 5 near the Minneapolis-St. Paul International Airport. In addition, one bridge will be redecked and ten other bridges will have other repairs. The drainage systems will be repaired and replaced, as needed, to stop erosion problems. The current letting date moved back from the original letting date due to better coordination of projects near the MSP airport and river crossings.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2017

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 18.3	\$ 18.9
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 3.0	\$ 3.2
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 21.3</b>	<b>\$ 22.1</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

Standard practices were used to develop cost estimates for this project.

### Project Risks

The project risks include traffic staging, ponding for erosion control, contaminated properties, project location adjacent to Fort Snelling and Fort Snelling State Park, and the Metropolitan Airports Commission interest in realigning the Post Road interchange.

### Schedule

Environmental Approval Date: pending approval  
 Municipal Consent Approval Date: not needed  
 Geometric Layout Approval Date: pending approval  
 Construction Limits Established Date: pending approval  
 Original Letting Date: 07/27/2018  
 Current Letting Date: 10/25/2019  
 Construction Season: 2020  
 Estimated Substantial Completion: 10/01/2020



Minnesota Department of Transportation  
 District M  
 1500 West County Road B2  
 (651) 234-7500

District Engineer: Scott McBride  
 Project Manager: Chad Casey

Revised Date: 12/15/2016

# PROJECT SUMMARY

Hwy 10

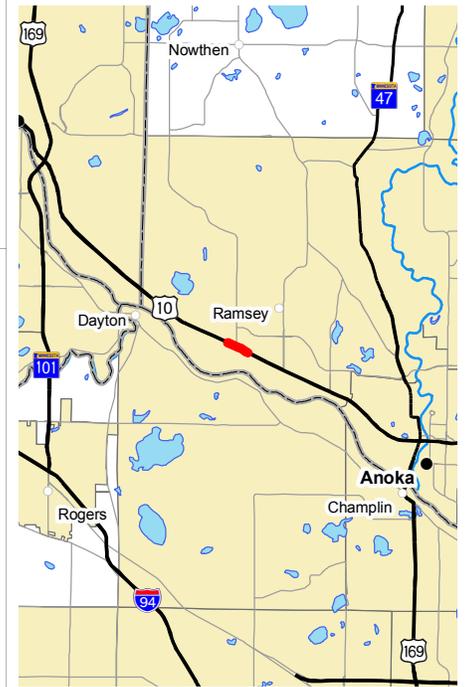
Hwy 10 at County Road 83 (Armstrong Blvd) interchange

Bridge 02007, &, 02586

State Project No. 0202-95

<http://www.highway10andarmstrong.com/>

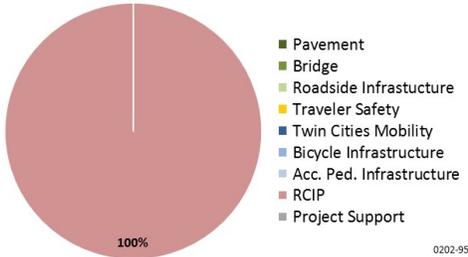
**Substantially Complete**



## Primary Purpose

Regional and Community Improvement  
Priority: CIMS, TIGER, CTIB, LRIP, BNSF, local funds

## Investment Category



## Project Description

Construct an interchange, railroad grade-separation, access closures and frontage road at Highway 10 and Armstrong Boulevard (CR 83).

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2013

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 23.0	\$ 29.8
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 5.0	\$ 5.1
Right of Way:	\$ 7.0	\$ 7.0
<b>Total:</b>	<b>\$ 35.0</b>	<b>\$ 41.9</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Recent Changes and Updates

2017 is the first year this project is identified as substantially complete. The Total Project Cost Estimate has not changed since last year's report. The Current Estimate reflects the known costs for the project.

## Project History

This project was led by Anoka County. The costs have remained the same since the 2015 report, which included an increase to construction engineering costs based on bids and final engineering costs.

Project funding included a Corridor Investment Management Strategy grant from MnDOT of \$10M in 2013, \$10M from the Counties Transit Improvement Board in 2014, \$10 million from a federal TIGER grant, Local Roads Improvement Program funds, BNSF funding, and local funds from Anoka Co. and the City of Ramsey. The CIMS funding represents the MnDOT portion of the funding. Current letting date was changed from original letting date due to needs of the lead agency, Anoka County.

## Key Cost Estimate Assumptions

The Current Estimate is based on bids and final engineering costs.

## Project Risks

The project is complete and major risks have been retired.

## Schedule

Environmental Approval Date: 06/04/2013  
Municipal Consent Approval Date: not needed  
Geometric Layout Approval Date: 10/1/2013  
Construction Limits Established Date: 01/01/2014  
Original Letting Date: 11/01/2014  
Current Letting Date: 03/31/2015  
Construction Season: 2015/2016  
Estimated Substantial Completion: 07/15/2016



Minnesota Department of Transportation  
District M  
1500 West County Road B2  
(651) 234-7500

District Engineer: **Scott McBride**  
Project Manager: **Phil Bergem**

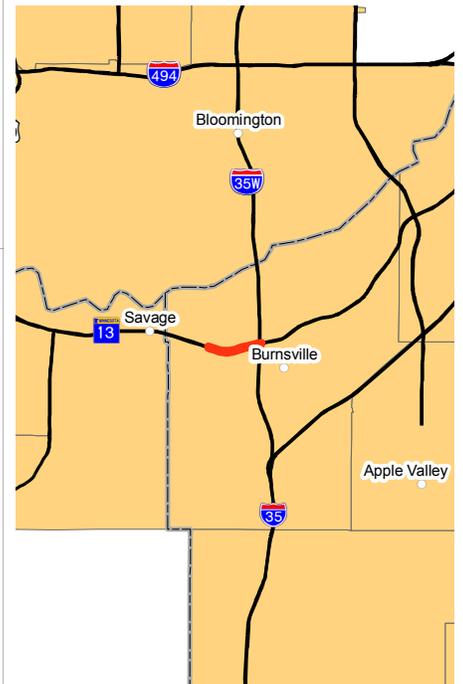
Revised Date: 12/15/2016

## PROJECT SUMMARY

Hwy 13  
County Road 5 in Burnsville  
Bridge 19036  
State Project No. 1901-148

<http://www.co.dakota.mn.us/Transportation/CurrentConstruction/CR5Interchan>

**Substantially Complete**



### Primary Purpose

Twin Cities Mobility: Spot Mobility Improvement

### Investment Category

\*This project was designed and scoped before the current highway investment plan MnSHIP was developed, which breaks projects into investment categories.

### Project Description

The project constructs a grade separated interchange at Highway 13 and County Road 5 in Burnsville. The project adds a new bridge, with a trail, to carry CR 5 over Hwy 13. Construction included noise walls, retaining wall and ponding.

### Recent Changes and Updates

2017 is the second year this project has been substantially complete and will not be in next year's report. The Current Estimate listed within the Total Project Cost Estimate reflects a substantially complete project and should be considered the Actual Cost of the project.

### Project History

This project was delivery by Dakota County and completed in 2015.

The need for the interchange was driven by traffic volumes exceeding the capacity of the at-grade intersection, which resulted in extended periods of heavy congestion during peak hours. This intersection also ranked 21st in the state's top worst crash cost intersections in 2009. MnDOT completed design work and Dakota County provided construction oversight.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2010

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 27.9	\$ 27.5
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 1.8	\$ 1.4
Right of Way:	\$ 10.0	\$ 10.6
<b>Total:</b>	<b>\$ 39.7</b>	<b>\$ 39.5</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

Standard practices were used to develop costs.

### Project Risks

The project is complete and no risks remain.

### Schedule

Environmental Approval Date: 02/14/2012  
Municipal Consent Approval Date: Not Needed  
Geometric Layout Approval Date: 7/28/2011  
Construction Limits Established Date: Need Unknown  
Original Letting Date: 2013  
Current Letting Date: 09/15/2012  
Construction Season: 2013/2015  
Estimated Substantial Completion: 2015



Minnesota Department of Transportation  
District M  
1500 West County Road B2  
(651) 234-7500

**District Engineer:** Scott McBride  
**Project Manager:** Dakota County

**Revised Date:** 12/15/2016

## PROJECT SUMMARY

Hwy 36

Lexington Ave bridge over Hwy 36 in Roseville

Bridge 5723

State Project No. 6212-148

<http://www.dot.state.mn.us/metro/projects/hwy36roseville/>

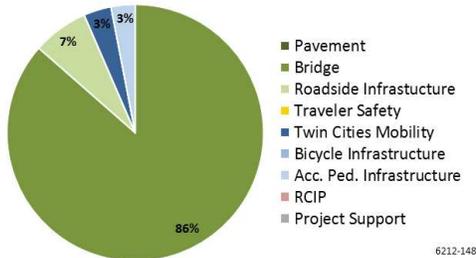
**Substantially Complete**



### Primary Purpose

Performance-based need: Bridge Condition

### Investment Category



6212-148

### Project Description

This project replaces the Lexington Avenue bridge including access ramps. It also addresses ADA issues on the multiuse trail and replaces two existing signals at the ramp terminals.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2011

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 13.6	\$ 12.5
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 2.5	\$ 2.5
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 16.1</b>	<b>\$ 15.0</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Recent Changes and Updates

2017 is the first year this project is identified as substantially complete. This project was open to traffic in November 2016. The Current Estimate listed in the Total Project Cost Estimate has not changed since the 2016 Major Highway Projects Report.

### Project History

In 2015, the project letting date was moved to avoid conflicts with I-35E work in 2015. The change in the TPCE of \$16.1 million to \$15 million in 2015 was due to the construction bid coming in lower than the estimate. Pavement work on westbound Hamline Ave ramps was added for staging/future MnPASS lane.

The condition of the Lexington Avenue bridge was the driving force behind this project. The Lexington Ave. bridge, constructed in 1938, needed major rehabilitation. The bridge had a sufficiency rating of 61 with a status of "structurally deficient". Bridge 5723 is a Chapter 152 bridge and was mandated by the Legislature to be replaced by 2018.

### Key Cost Estimate Assumptions

Lexington Ave. was closed for bridge construction while traffic used the temporary bypass. Four lanes of traffic were maintained on Hwy 36 during construction.

### Project Risks

The project is complete and no risks remain.

### Schedule

Environmental Approval Date: 8/7/2012  
 Municipal Consent Approval Date: not needed  
 Geometric Layout Approval Date: 4/25/2014  
 Construction Limits Established Date: August 2012  
 Original Letting Date: 01/25/2002  
 Current Letting Date: 10/23/2015  
 Construction Season: 2016  
 Estimated Substantial Completion: 11/19/2016



Minnesota Department of Transportation  
 District M  
 1500 West County Road B2  
 (651) 234-7500

**District Engineer:** Scott McBride  
**Project Manager:** Michael Kruse

**Revised Date:** 12/15/2016

# PROJECT SUMMARY

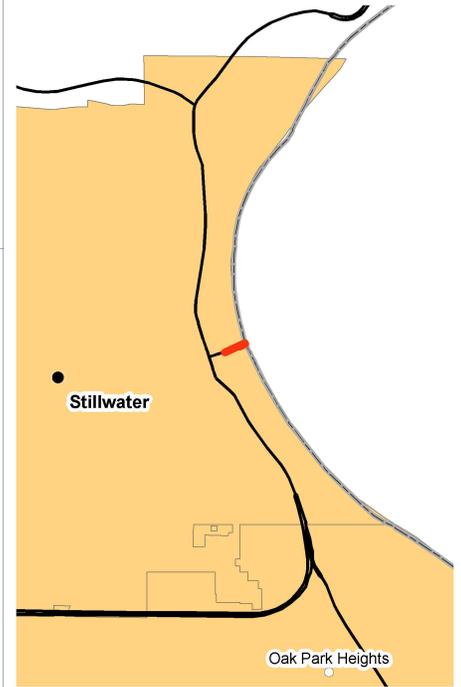
Hwy 36

Oak Park Heights, Stillwater and Bayport

Bridge 82043, 82047, 82048, 82045

State Project No. 8221-01, 8214-114, 8221-82045A, etc.

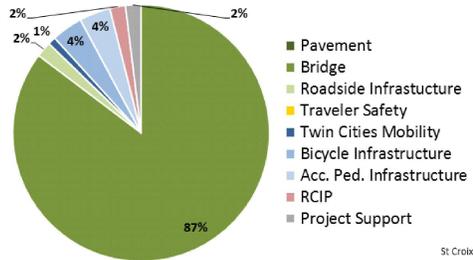
[www.mndot.gov/stcroixcrossing/](http://www.mndot.gov/stcroixcrossing/)



## Primary Purpose

Performance-based Need: Bridge Condition

## Investment Category



## Project Description

A joint MnDOT and WisDOT project to replace a major river bridge over the St. Croix River and construct/reconstruct 7 miles of highway (4 in Minn. and 3 in Wisc.). In Minnesota, reconstruct two intersections (Hwy 36/Osgood, Hwy 36/Greeley) and one interchange (Hwy 36/Hwy 95). In Wisconsin, construct one overpass (WIS 64/WIS 35) and one interchange (WIS 64/County Rd E). Convert the Stillwater Lift Bridge to a bicycle/pedestrian bridge and construct a 4.5 mile bicycle and pedestrian loop trail that connects the lift bridge and the new St. Croix Crossing with trails in both states. Implementation of an environmental mitigation package is included in this project.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2010

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 410.8	\$ 473.6
Other Construction Elements:	\$ 136.2	\$ 73.3
Engineering:	\$ 55.0	\$ 85.4
Right of Way:	\$ 31.4	\$ 14.5
<b>Total:</b>	<b>\$ 633.4</b>	<b>\$ 646.8</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Recent Changes and Updates

The new river bridge was open to traffic in August 2017. Roadway approaches, loop trails, state entry/exit signs and landscaping continued to be worked on in 2017. Additional loop trails, the Stillwater Lift Bridge conversation, landscaping and wetland restoration projects will continue into 2018 and 2019. The current Total Project Cost Estimate has not change since 2016.

## Project History

The St. Croix Crossing Bridge replaces the Stillwater Lift Bridge (Bridge 4654) built in 1931. Congressional approval was granted in March 2012 to allow the project to proceed. In 2013 permits were requested and the project began construction.

The design-build contract for the Minnesota approach work on Hwy 36/95 began in 2013 and was substantially complete in 2015. The bridge pier foundations began construction in 2013 and were completed in early 2014. Work on the bridge superstructure contract began in 2014 and was open in 2017. Environmental mitigation items continue to be implemented in both states.

## Key Cost Estimate Assumptions

Commitments made in the 2006 supplemental final environmental impact study are being implemented, including the roadway design, bridge type and mitigation. Total project costs shown above are split with Wisconsin DOT and include construction, right of way and risk. Baseline estimate assumed only the MN portion of the contingency costs and was a planning level estimate. Current estimates are based on June 30, 2016 data and includes contingencies for both MN and WI.

## Project Risks

Legal claims of schedule impacts, cost and permits are potential risks.

## Schedule

Environmental Approval Date: 09/05/2012  
 Municipal Consent Approval Date: 2006 & 2012  
 Geometric Layout Approval Date: 1995 through 2014  
 Construction Limits Established Date: 2006  
 Original Letting Date: 1997  
 Current Letting Date: 2013  
 Construction Season: 2013/2019  
 Estimated Substantial Completion: Fall 2019



Minnesota Department of Transportation  
 District M  
 1500 West County Road B2  
 (651) 234-7500

District Engineer: Scott McBride  
 Project Manager: Todd Clarkowski

Revised Date: 12/15/2016

## PROJECT SUMMARY

Hwy 52

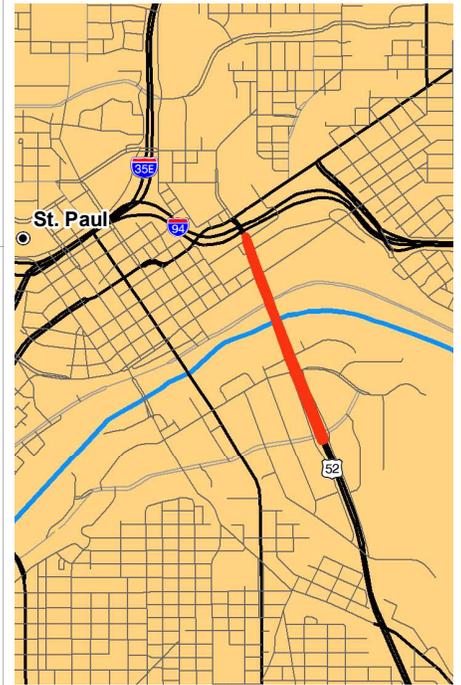
Lafayette River Bridge over Mississippi River in St. Paul

Bridge 62026, 9800

State Project No. 6244-30

<http://www.dot.state.mn.us/lafayettebridge/>

Substantially Complete



### Primary Purpose

Performance-based Need: Bridge Condition

### Investment Category

\*This project was designed and scoped before the current highway investment plan MnSHIP was developed, which breaks projects into investment categories.

### Project Description

Major river bridge replacement including ramps, loops to I-94 and a connection to East 7th Street, replace/rehab Highway 52 bridge over Plato Boulevard and Hwy 52 bridge over I-94, and construct a full length pedestrian bridge.

### Recent Changes and Updates

2017 is the second year this project has been substantially complete and will not be in next year's (2018) report. The Current Estimate reflects a substantially complete project and should be considered the actual cost of the project.

### Project History

Construction was complete in November 2015. Previous cost increases on the project were driven by right of way settlements. Additionally, costs for supplemental agreements with the contractor for unforeseen construction issues, such as repairing freeze/thaw damage to concrete.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2009

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 130.4	\$ 130.4
Other Construction Elements:	\$ 0.0	\$ 16.2
Engineering:	\$ 26.1	\$ 22.1
Right of Way:	\$ 16.2	\$ 28.7
<b>Total:</b>	<b>\$ 172.7</b>	<b>\$ 197.4</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

Construction has been completed.

### Project Risks

Major construction has been completed, and risks retired.

### Schedule

Environmental Approval Date: 09/17/2009  
 Municipal Consent Approval Date: not needed  
 Geometric Layout Approval Date: 09/17/2009  
 Construction Limits Established Date: 09/17/2009  
 Original Letting Date: 10/21/2011  
 Current Letting Date: 11/19/2010  
 Construction Season: 2011/2015  
 Estimated Substantial Completion: 10/01/2015



Minnesota Department of Transportation  
 District M  
 1500 West County Road B2  
 (651) 234-7500

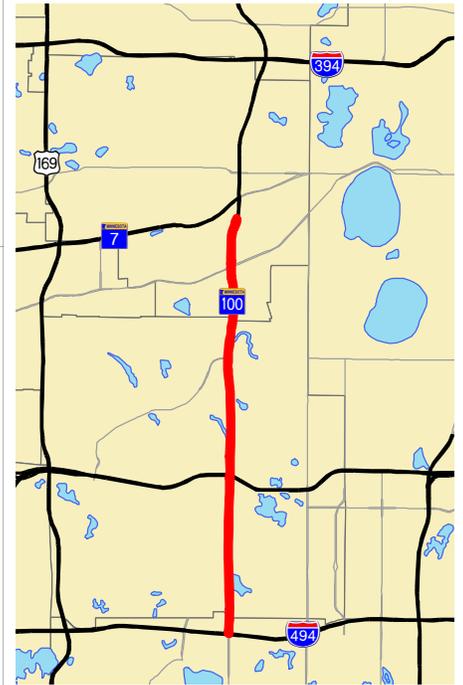
**District Engineer:** Scott McBride  
**Project Manager:** Dale Gade

**Revised Date:** 12/15/2016

# PROJECT SUMMARY

Hwy 100  
 St. Louis Park  
 Bridge 9431, 9500, 27103, 27104, 27210, 9432, 27029, 27102  
 State Project No. 2733-89  
<http://www.dot.state.mn.us/metro/projects/hwy100slp/>

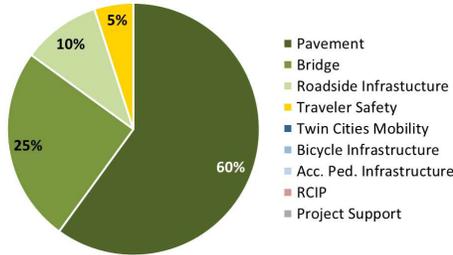
**Substantially Complete**



## Primary Purpose

Performance-based needs: Bridge Condition  
 Performance-based needs: Pavement Condition

## Investment Category



## Project Description

The project includes a bituminous pavement overlay, drainage, guardrail improvements, overlay four bridges and repairs to four other bridges on Hwy 100 from I-494 to just north of West 36th St in St. Louis Park.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2014

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 15.9	\$ 16.7
Other Construction Elements:	\$ 0.0	\$ 0.2
Engineering:	\$ 2.8	\$ 1.4
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 18.7</b>	<b>\$ 18.3</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Recent Changes and Updates

2017 is the second year this project has been substantially complete and will not be in next year's report. The project was open to traffic in the fall of 2016. There have been no changes to the Total Project Cost Estimate since the 2015 report.

## Project History

This project improves the last sub-standard section on Hwy 100 south of I-394 which is one of the most congested freeways in the Metro area. There was a change in 2015 from the baseline estimate to the current estimate and was a result of changing the concrete pavement repair to a 4 inch bituminous overlay (based on Materials Unit recommendation). Additional traffic control costs were reduced due to the change from concrete pavement repair to bituminous overlay. The project's construction letting date was advanced in 2013 due to funding opportunities and shifting projects in the STIP.

## Key Cost Estimate Assumptions

Standard practices were used to develop estimates for this project.

## Project Risks

None at this point.

## Schedule

Environmental Approval Date: 2015  
 Municipal Consent Approval Date: not needed  
 Geometric Layout Approval Date: 2015  
 Construction Limits Established Date: 2015  
 Original Letting Date: 06/14/2018  
 Current Letting Date: 06/05/2015  
 Construction Season: 2015/2016  
 Estimated Substantial Completion: 10/26/2013



Minnesota Department of Transportation  
 District M  
 1500 West County Road B2  
 (651) 234-7500

**District Engineer:** Scott McBride  
**Project Manager:** Chad Casey

**Revised Date:** 12/15/2016

# PROJECT SUMMARY

Hwy 149

Smith Avenue High Bridge over the Mississippi River in St. Paul

Bridge 62090

State Project No. 6223-20

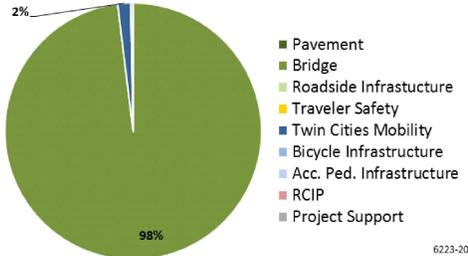
<http://www.dot.state.mn.us/metro/projects/hwy149highbridge>



## Primary Purpose

Performance-based Need: Bridge Condition

## Investment Category



## Project Description

The project involves redecking the Smith Avenue High Bridge over the Mississippi River. Associated miscellaneous work, such as replacing the approach panels, is included. ADA facilities adjacent to the bridge will also be upgraded to comply with the current standards.

Changes in 2016 included a TPCE change from \$17 million to \$16.8 million. The project will be delivered using the Construction Manager/General Contractor project delivery method, which is expected to save time, reduce risk and foster innovation. Also, in 2016, a pavement project (SP1917-45) on Hwy 149 was no longer tied to the bridge project.

## Recent Changes and Updates

Additional inspections and scoping in 2016, found the bridge more deteriorated than originally known when the project was initially scoped in 2012. This deterioration included deck surface and under the deck, increasing costs for construction. Initial scoping efforts did not accurately reflect the costs associated with the elevated bridge above a major river corridor. The bridge is closed to all traffic during construction for one year, which added costs to accelerated construction to keep closures to one year. Construction bids came in higher and a separate work package was developed to install a scaffolding system on the bridge prior to the start of major construction work in order to create safe and efficient access for construction crews. The cost of this scaffolding is not included in this project's cost.

## Project History

Changes in 2015 included updating the letting date to Jan. 27, 2017, with an estimated substantial completion date of Jan. 26, 2018. A pavement project in West St. Paul (SP 1917-45) was tied to the bridge project.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2013

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 14.2	\$ 36.6
Other Construction Elements:	\$ 0.0	\$ 2.3
Engineering:	\$ 2.8	\$ 7.8
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 17.0</b>	<b>\$ 46.7</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

Several significant changes occurred with this project in 2017 that greatly increased the TPCE from \$17 million to \$46.7 million, including discovery of unknown bridge damage, the original scope undervaluing the construction costs associated with this unique bridge type and location, and an accelerated construction timetable with a one-year bridge closure. Standard practices were used to develop estimates for this project. The project uses the CMGC method of delivery.

## Project Risks

The bridge needs to be closed for one construction season, which impacts access for local businesses and neighborhoods. The rail line crossing under the north end of the bridge needs agreements and flagging during construction, and must maintain river navigation during construction.

## Schedule

Environmental Approval Date: 04/10/2017  
 Municipal Consent Approval Date: not needed  
 Geometric Layout Approval Date: Pending/CMGC  
 Construction Limits Established Date: 04/10/2017  
 Original Letting Date: 06/14/2017  
 Current Letting Date: 08/02/2017  
 Construction Season: 2017/2018  
 Estimated Substantial Completion: 12/01/2018



Minnesota Department of Transportation  
 District M  
 1500 West County Road B2  
 (651) 234-7500

District Engineer: **Scott McBride**  
 Project Manager: **Dale Gade/Steve Kordows**  
 Revised Date: 12/15/2016

# PROJECT SUMMARY

Hwy 169

Nine Mile Creek Bridge (Hopkins, Edina, Minnetonka)

Bridge 27568

State Project No. 2772-113

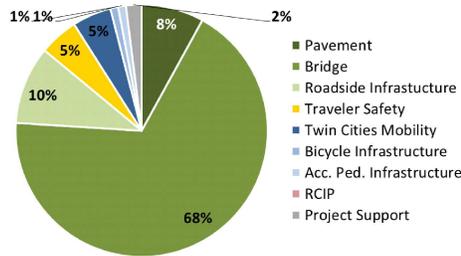
<http://www.dot.state.mn.us/metro/projects/hwy169hopkins/index.html>



## Primary Purpose

Performance-based needs: Bridge Condition

## Investment Category



## Project Description

The project will replace the bridge and culvert over Nine Mile Creek in Hopkins and Edina. This is a design build project tied to 2772-104, 2772-105, and 2772-110.

## Recent Changes and Updates

The Nine Mile Creek Bridge has been under construction during calendar year 2017. To keep the project to one construction season, the bridge was closed to all traffic, with the bridge opening to traffic in October 2017. The closure resulted in traffic impacts to the local road systems and MnDOT has funded traffic control officers and other detours costs in residential neighborhoods impacted by the detoured traffic. The current Total Project Cost Estimate reflects the bid amount from Aug. 5, 2016. The bid came in lower than the most recent estimate of \$65.9 million due to a competitive bid environment.

## Project History

In 2016, the Nine Mile Creek Bridge replacement was split from the pavement preservation project on US 169 (SP 2772-105) and was developed as a design-build contract. In the 2015 Minnesota legislative session, funding was provided for the Nine Mile Creek Bridge project (SP 2772-113) and it was selected to be moved into SFY 2017. Before the 2015 funding, this project was planned for SFY 2021. The bridge is approximately 3,000 ft. long and replacement is a significant undertaking.

## Schedule

Environmental Approval Date: 03/01/2016  
 Municipal Consent Approval Date: 2016  
 Geometric Layout Approval Date: 2016  
 Construction Limits Established Date: 2016  
 Original Letting Date: 06/14/2021  
 Current Letting Date: 08/05/2016  
 Construction Season: 2017  
 Estimated Substantial Completion: 10/31/2017

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2016

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 65.9	\$ 60.2
Other Construction Elements:	\$ 1.8	\$ 1.8
Engineering:	\$ 1.3	\$ 1.3
Right of Way:	\$ 0.9	\$ 0.9
<b>Total:</b>	<b>\$ 69.9</b>	<b>\$ 64.2</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

The design-build project delivery method estimates a savings over traditional design-bid-build project delivery.

## Project Risks

Risks include agency permits, remove pilings, flood plain mitigation, noise walls, traffic impacts of a full road and bridge closure, and traffic impacts of parallel projects.



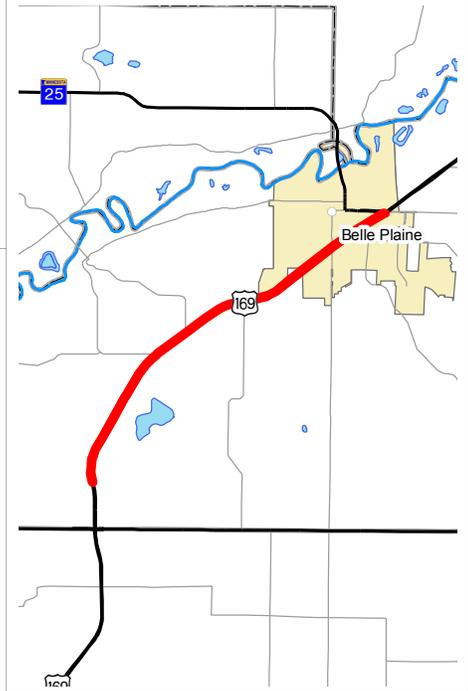
Minnesota Department of Transportation  
 District M  
 1500 West County Road B2  
 (651) 234-7500

District Engineer: **Scott McBride**  
 Project Manager: **Andrew Lutaya**

Revised Date: 12/15/2016

## PROJECT SUMMARY

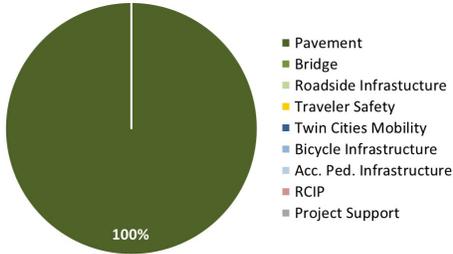
Hwy 169  
Hwy 19 to Ash St in Belle Plaine  
Bridge NA  
State Project No. 7007-34  
NA



### Primary Purpose

Performance-based Need: Pavement

### Investment Category



### Project Description

The project is an unbonded concrete overlay of Highway 169 from Highway 19 to Ash Street in Belle Plaine. It also includes some minor CPR work and minor drainage repairs.

### Recent Changes and Updates

Changes in 2017 include that the project is now tied to SP 7008-111 (another pavement project on US Hwy 169), the letting date was moved to SFY2018, and the current construction letting estimate was lowered from \$21.5 million to \$18.7 million due to coordination with another project, 7007-34, which produced savings in traffic cross overs and traffic control. There was a slight increase to the engineering and the addition of \$800,000 added for risk to other construction elements.

### Project History

This project was first included in the Major Highway Projects Report in 2016. This project will provide a long-term pavement improvement to this road segment along a heavily traveled corridor with significant freight volumes.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2016

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 21.5	\$ 18.7
Other Construction Elements:	\$ 0.0	\$ 0.8
Engineering:	\$ 3.6	\$ 3.7
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 25.1</b>	<b>\$ 23.2</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

Standard practices were used to develop cost estimates for this project.

### Project Risks

Project risks include soil contamination, traffic detour and access for adjacent properties, including a school and businesses.

### Schedule

Environmental Approval Date: 02/27/2017  
Municipal Consent Approval Date: not needed  
Geometric Layout Approval Date: pending  
Construction Limits Established Date: pending  
Original Letting Date: 07/27/18  
Current Letting Date: 01/26/2018  
Construction Season: 2018/2020  
Estimated Substantial Completion: 10/01/2020



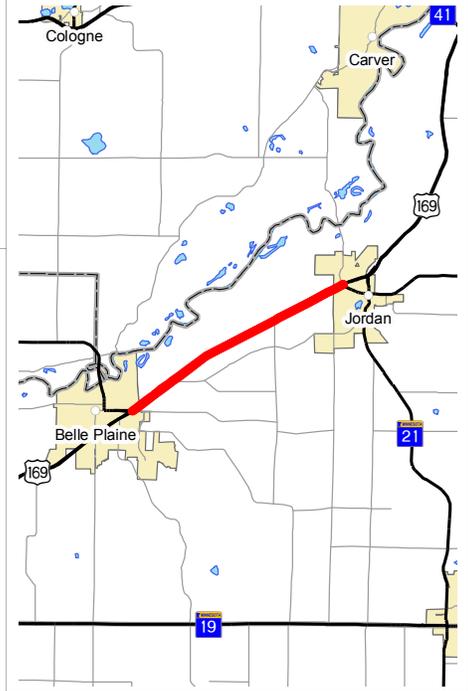
Minnesota Department of Transportation  
District M  
1500 West County Road B2  
(651) 234-7500

**District Engineer:** Scott McBride  
**Project Manager:** Nicole Peterson

**Revised Date:** 12/15/2016

# PROJECT SUMMARY

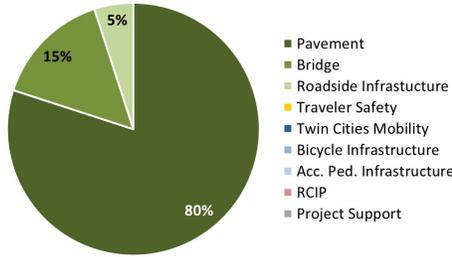
Hwy 169  
 Scott County, from Hwy 25 in Belle Plaine to Hwy 282 in Jordan  
 Bridge NA  
 State Project No. 7008-111  
 NA



## Primary Purpose

Performance-based Need: Pavement  
 Conditions Performance-based Need: District Safety Plan

## Investment Category



## Project Description

This project is an unbonded concrete overlay, median closures, add U-turns, and cable guardrails on Highway 169 from Highway 25 in Belle Plaine to Highway 282 in Jordan.

Driven by pavement needs, the unbonded overlay is a long term solution to cracking due to the freeze/thaw cycle. Increasing traffic volumes have led to safety concerns with numerous access points and a narrow median. This project will eliminate median crossings and consolidate left-turn and crossing movements along with creating left turn and acceleration lanes.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2014

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 18.0	\$ 15.8
Other Construction Elements:	\$ 0.0	\$ 0.7
Engineering:	\$ 3.0	\$ 3.1
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 21.0</b>	<b>\$ 19.6</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Recent Changes and Updates

Changes in 2017 include tying the project to SP 7007-34, another pavement project on US Highway 169. The letting date was moved to SFY2018. The current Construction Letting Estimate decreased from \$16.6 million in 2016 to \$15.8 million due to coordination with 7007-34, (Total Project Cost Estimate from \$19.7 million to \$18.8 million) and savings to traffic cross-overs and traffic control. Other costs that increased include \$0.1 million to engineering and an additional \$0.7 million to Other Construction Elements for risk.

## Project History

In 2016 a scoping change reduced the construction letting costs resulting in a lower Total Project Cost Estimate.

A Reduced Conflict Intersection is being constructed at the Hwy 169/CSAH 59 intersection. Additional access management may be implemented with support from local partners.

## Key Cost Estimate Assumptions

Median closures and turn lane costs are based on prior projects and will be adjusted after layout preparation and quantity development.

## Project Risks

Potential local opposition to the Reduced Conflict Intersection.

## Schedule

Environmental Approval Date: 04/04/2017  
 Municipal Consent Approval Date: not needed  
 Geometric Layout Approval Date: Pending  
 Construction Limits Established Date: Pending  
 Original Letting Date: 07/21/2017  
 Current Letting Date: 01/26/2018  
 Construction Season: 2018/2020  
 Estimated Substantial Completion: 10/01/2020



Minnesota Department of Transportation  
 District M  
 1500 West County Road B2  
 (651) 234-7500

**District Engineer:** Scott McBride  
**Project Manager:** Nicole Peterson

**Revised Date:** 12/15/2016

# PROJECT SUMMARY

Hwy 610

Hwy 81 to I-94 in Maple Grove

Bridge 27228, 27230, 27245, 27246, 27251, 27R10, 27R11, 27W15, 27W16

State Project No. 2771-37

<http://www.dot.state.mn.us/metro/projects/610west/index.html>

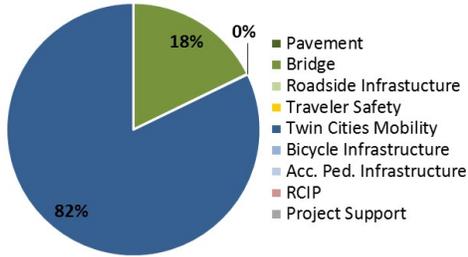
**Substantially Complete**



## Primary Purpose

Regional & Community Improvement Priority:  
Corridors of Commerce Project: Metro  
Capacity Development

## Investment Category



## Project Description

Realign and extend highway from County Road 81 and Elm Creek Boulevard to I-94, including construct Highway 610 bridge over Fernbrook Lane, construct interchange at Hwy 610 and Maple Grove Parkway, close and remove a half mile segment of 101st Avenue North, between I-94 and Fernbrook Lane, and extend 105th Ave west from Holly Lane across I-94 to a new intersection with 101st Ave.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2014

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 112.0	\$ 80.7
Other Construction Elements:	\$ 11.0	\$ 10.0
Engineering:	\$ 3.6	\$ 3.6
Right of Way:	\$ 49.0	\$ 45.6
<b>Total:</b>	<b>\$ 175.6</b>	<b>\$ 139.9</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Recent Changes and Updates

2017 is the first year this project is identified as substantially complete. This project was open to traffic in the fall 2016 and additional work continued in the summer of 2017. The project costs have not changed since the 2014 Major Highway Projects Report.

## Project History

This project is the final connection of I-94 to Hwy 610. This project connects I-94 to the existing portion of Hwy 610 that currently ends at the CSAH 81, Elm Creek Blvd., and Hwy 610 interchange. Project costs changed in the 2014 MHPR due to the award of the construction bid at \$80.7 million in 2014. While it is not certain, the competitive bid was thought to be a result of the economy recovering in early 2010's. During or when emerging from an economic downturn, it is not uncommon for bids to be competitive and much less than expected such as this. The project is being built with design-build as the contracting process.

## Key Cost Estimate Assumptions

Standard practices were used to develop cost estimates.

## Project Risks

Construction substantially complete.

## Schedule

Environmental Approval Date: 02/27/2014  
Municipal Consent Approval Date: 03/03/2014  
Geometric Layout Approval Date: 6/2/2014  
Construction Limits Established Date: 10/08/2013  
Original Letting Date: 08/08/2014  
Current Letting Date: 08/08/2014  
Construction Season: Oct. 2014/Oct. 2016  
Estimated Substantial Completion: 10/15/2016



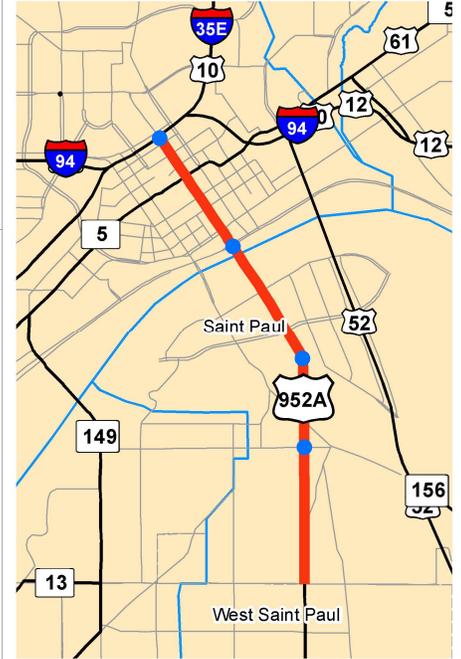
Minnesota Department of Transportation  
District M  
1500 West County Road B2  
(651) 234-7500

**District Engineer:** Scott McBride  
**Project Manager:** Jerome Adams

**Revised Date:** 12/15/2016

## PROJECT SUMMARY

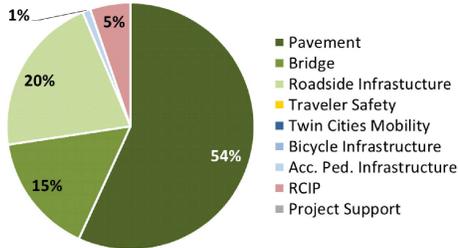
Hwy 952A (Robert St)  
 Robert St, from Annapolis St to 12th St. in St. Paul  
 Bridge 62894, 62050, 9036, 90381  
 State Project No. 6217-43  
 NA



### Primary Purpose

Pavement-based needs: Pavement Condition

### Investment Category



### Project Description

The project includes pavement overlay, rehabilitation on four bridges, drainage, traffic signals, ADA improvements and sidewalk replacement.

### Recent Changes and Updates

2017 is the first year this project is included in the Major Highway Projects Report. The original letting date in 2018 was moved to 2020 due to the scoping process revealing additional needs, such as utilities and ADA work, that did not have funding in that fiscal year.

### Project History

Robert Street is a low speed urban arterial. This corridor was coded as a municipal street and is no longer signed as a state highway. The pavement in this heavily used urban segment is in very poor condition with multiple surface problems. ADA pedestrian ramps have not been updated to current standards and sidewalks are in poor condition throughout the corridor.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2017

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 12.8	\$ 12.8
Other Construction Elements:	\$ 1.4	\$ 1.4
Engineering:	\$ 2.9	\$ 2.9
Right of Way:	\$ 0.7	\$ 0.7
<b>Total:</b>	<b>\$ 17.8</b>	<b>\$ 17.8</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

Robert St Bridge over I-94 is a redeck. Sidewalk replacement is based on estimate of the percent of sidewalks out of compliance.

### Project Risks

Project risks include unknown right of way needs and alignment in downtown St. Paul, cost to repair drainage infrastructure, presence of contaminated materials and city utility needs. The significance of these risks may result in the project moving out of 2020 or being split into phases to be delivered over a number of years.

### Schedule

Environmental Approval Date: pending  
 Municipal Consent Approval Date: pending  
 Geometric Layout Approval Date: pending  
 Construction Limits Established Date: pending  
 Original Letting Date: 07/27/2018  
 Current Letting Date: 01/31/2020  
 Construction Season: 2020  
 Estimated Substantial Completion: 11/01/2020



Minnesota Department of Transportation  
 District M  
 1500 West County Road B2  
 (651) 234-7500

District Engineer: **Scott McBride**  
 Project Manager: **Marcell Walker**

Revised Date: 12/15/2016

# PROJECT SUMMARY

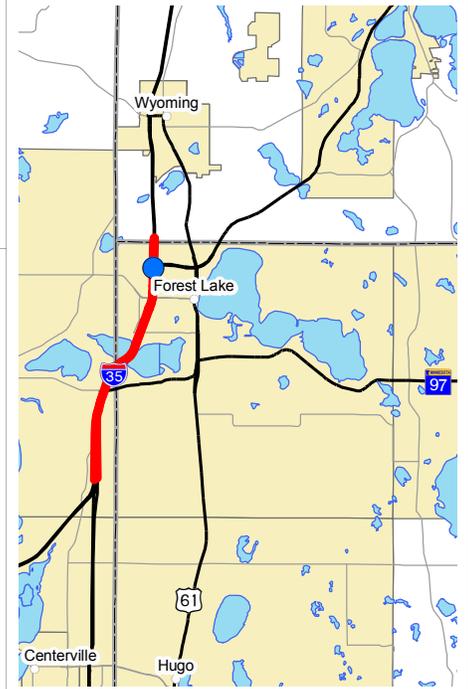
I-35

Washington, Anoka Counties

Bridge 82815, 02804, 02806

State Project No. 8280-47

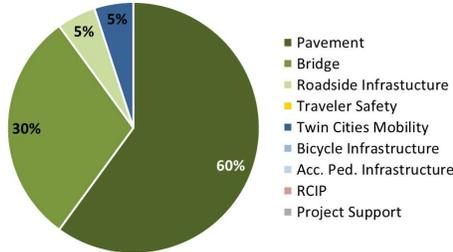
<http://www.dot.state.mn.us/metro/projects/35linolakes/index.html>



## Primary Purpose

Performance-based Need: Pavement Condition and Bridge Condition.

## Investment Category



## Project Description

This project consists of an unbonded concrete overlay, and replacement of three bridges. The project includes I-35E from 80th Street E to the junction of I-35/I-35W/I-35E; on I-35W from north of Main Street to the junction of I-35/I-35W/I-35E; and on I-35 from the junction of I-35/I-35W/I-35E to north of Highway 8. The three bridges are: northbound I-35W over southbound I-35E, Highway 97 over I-35, and Highway 8 over I-35.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2015

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 39.6	\$ 61.1
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 6.4	\$ 6.9
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 46.0</b>	<b>\$ 67.4</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Recent Changes and Updates

Changes in 2017 include an increase in the TPCE from \$56.6 million to \$67.4 million due to higher bids for this design-build project. Additionally, the project received \$4 million from Anoka County to expand the Hwy 97 Bridge, and an additional \$1.4 million in federal freight funding was used to complete a project at the Forest Lake weigh station within the larger project.

## Project History

In 2016, the TPCE was \$58.6 million, with construction letting increasing to \$50.1 million and engineering to \$6.9 million. The \$10 million increase to the construction letting cost was due to discovery of damage to the substructure of the roadway and refining the cost estimate for project components as the project moves into final design. MnDOT has also adjusted the estimate to adapt to a fluctuating bid environment where MnDOT expects bids for this project to be much higher than when the original estimate was developed during an economic downturn.

The project was first included in the MHPR in 2014 as a pavement and bridge project to address poor pavement and bridge condition.

## Key Cost Estimate Assumptions

Standard practices were used to develop cost estimates for this project.

## Project Risks

Risks include traffic impacts during construction, interagency coordination and communication, and previously identified risks realized for cost increases due to switching the delivery method to design-build delivery.

## Schedule

Environmental Approval Date: 10/07/2015  
 Municipal Consent Approval Date: 10/07/2015  
 Geometric Layout Approval Date: 01/16/2015  
 Construction Limits Established Date: 01/16/2015  
 Original Letting Date: 07/21/2017  
 Current Letting Date: 06/02/2017  
 Construction Season: 2017/2018  
 Estimated Substantial Completion: 11/15/2018



Minnesota Department of Transportation  
 District M  
 1500 West County Road B2  
 (651) 234-7500

**District Engineer:** Scott McBride  
**Project Manager:** Ryan Coddington

**Revised Date:** 12/15/2016

# PROJECT SUMMARY

I-35E

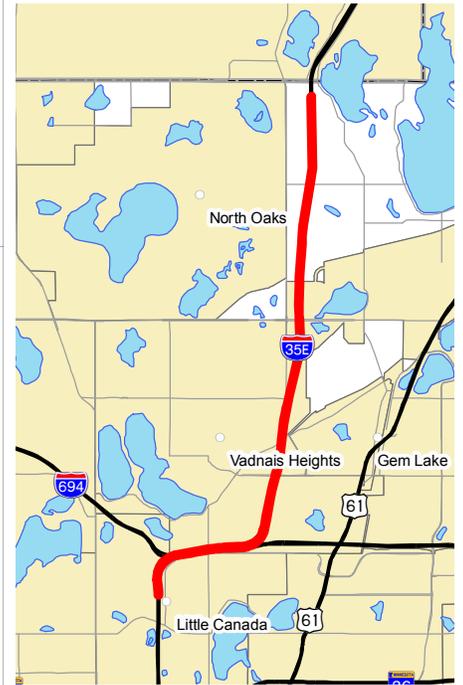
Little Canada Rd in Little Canada to Lino Lakes

Bridge NA

State Project No. 6281-47

<http://www.dot.state.mn.us/metro/projects/i35vadnaisheights/index.html>

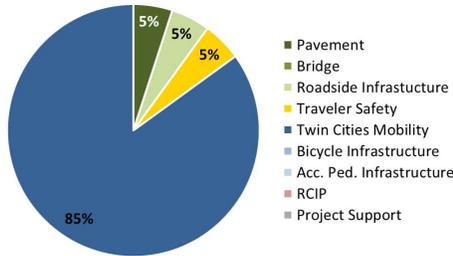
**Substantially Complete**



## Primary Purpose

Twin Cities Mobility: Managed Lanes

## Investment Category



## Project Description

This project extends the I-35E MnPASS from Little Canada Road to CSAH 96 in both directions (with exceptions in the I-35E/694 Commons areas) and north to Lino Lakes for the northbound lane only.

## Recent Changes and Updates

2017 is the first year this project is identified as substantially complete. This project is open to traffic and has some remaining work to noise walls, overhead signs and MnPASS toll readers. There were no changes to the Total Project Cost Estimate in 2017.

## Project History

In 2016, the construction letting costs changed to reflect the awarded bid, which was higher than estimate, and may be the result of added costs for increased traffic control during construction. This project is an extension of the I-35E MnPASS lane along I-35E, from Little Canada Road to CSAH 96 in both directions (with exceptions in the I35E/694 Commons areas) and north past County Road J for the northbound lane only. A MnPASS lane will be added where the Goose Lake Bridge will be built.

The Goose Lake Road Bridge (SP 6281-25) is included as a separate project in this report. Project funding comes from a Managed Lane setaside and Chapter 152 Transit Advantage bonds.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2016

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 19.4	\$ 22.0
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 3.3	\$ 3.3
Right of Way:	\$ 0.3	\$ 0.3
<b>Total:</b>	<b>\$ 23.0</b>	<b>\$ 25.6</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

Standard practices were used to develop cost estimates for this project.

## Project Risks

The project is timed with other area projects, such as the Goose Lake Bridge project (6281-25). This area has high traffic flow and staging must be carefully planned to minimize accidents during construction. Potential impacts of environmentally sensitive areas.

## Schedule

Environmental Approval Date: December 2015  
 Municipal Consent Approval Date: February 2015  
 Geometric Layout Approval Date: December 2015  
 Construction Limits Established Date: December 2015  
 Original Letting Date: 03/25/16  
 Current Letting Date: 03/18/2016  
 Construction Season: 2016/2017  
 Estimated Substantial Completion: 07/14/2017



Minnesota Department of Transportation  
 District M  
 1500 West County Road B2  
 (651) 234-7500

**District Engineer:** Scott McBride  
**Project Manager:** Dale Gade

**Revised Date:** 12/15/2016

# PROJECT SUMMARY

I-35E

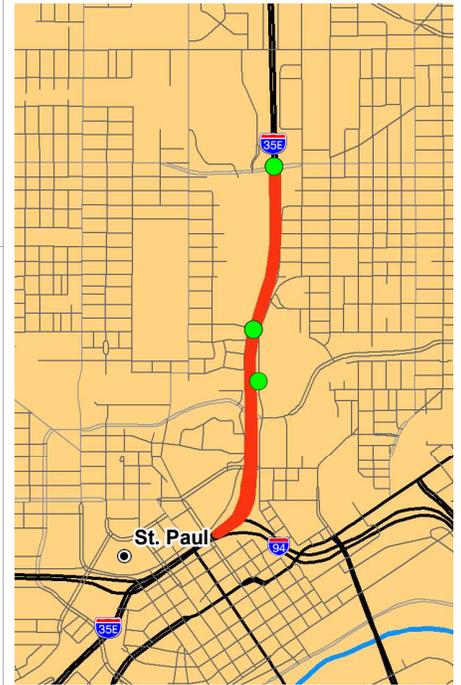
Cayuga Bridge between University Ave and Maryland Ave

Bridge 6515, 9265, 6517

State Project No. 6280-308

<http://www.dot.state.mn.us/metro/projects/35estpaul/cayuga.html>

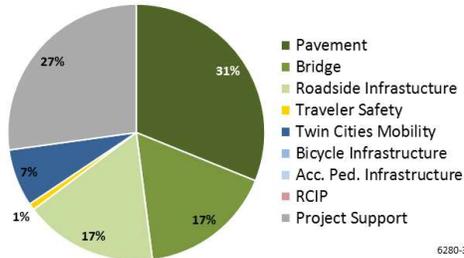
**Substantially Complete**



## Primary Purpose

Performance-based Need: Bridge Condition

## Investment Category



## Project Description

The project replaces the Cayuga Bridge (6515), Pennsylvania Ave. Bridge (9265), and the BNSF RR Bridge (6517). It also replaces the Pennsylvania interchange with the interchange at Cayuga to solve safety and operational problems, improve geometrics on 35E and extend the auxiliary lane from Pennsylvania to Maryland.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2010

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 143.9	\$ 115.8
Other Construction Elements:	\$ 5.3	\$ 28.5
Engineering:	\$ 24.4	\$ 26.0
Right of Way:	\$ 11.3	\$ 12.7
<b>Total:</b>	<b>\$ 184.9</b>	<b>\$ 183.0</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Recent Changes and Updates

2017 is the second year this project has been substantially complete and will not be in next year's report. The Total Project Cost Estimate (TPCE) has not changed since the 2013 Major Highway Projects Report.

## Project History

The Cayuga Bridge was built in 1965. Since then it has had bridge repairs and painting in 1975 and a "limited service" overlay in 2004. The Current Estimate reflects construction letting of \$116 million in 2012, which was a competitive bid likely the result of the economy recovering in the 2010s. During or when emerging from an economic downturn, it is not uncommon for bids to be competitive and much less than expected such as this. Other Construction elements include post-letting costs such as supplemental agreements. The letting date was moved up from 2014 to 2012 due to shifts in other projects in the STIP.

## Key Cost Estimate Assumptions

Costs do not include the Maryland bridge portion of the project.

## Project Risks

Major risks have been retired.

## Schedule

Environmental Approval Date: 09/15/2011  
 Municipal Consent Approval Date: 09/05/2012  
 Geometric Layout Approval Date: 5/10/2012  
 Construction Limits Established Date: 05/16/2011  
 Original Letting Date: 04/25/2014  
 Current Letting Date: 11/16/2012  
 Construction Season: 2012/2016  
 Estimated Substantial Completion: 07/01/2017



Minnesota Department of Transportation  
 District M  
 1500 West County Road B2  
 (651) 234-7500

**District Engineer:** Scott McBride  
**Project Manager:** Dale Gade

**Revised Date:** 12/15/2016

# PROJECT SUMMARY

I-35E

I-35E between Pennsylvania Ave and Little Canada Road  
 Bridge 6509, 6510, 6511, 6512, 6514, 6579, 9117, 9118, 9119, 9120

State Project No. 6280-367

<http://www.dot.state.mn.us/metro/projects/35estpaul/mnpass.html>

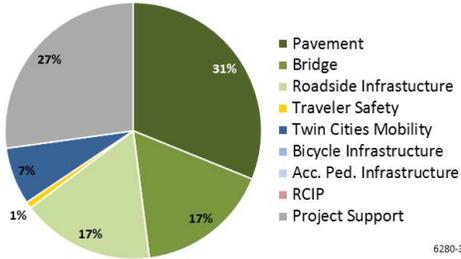
**Substantially Complete**



## Primary Purpose

Twin Cities Mobility: Managed Lanes  
 Performance-based Need: Pavement

## Investment Category



## Project Description

The I-35E MnPASS project includes long-term pavement rehabilitation between Maryland Avenue and Little Canada Road, replacement of the Arlington, Wheelock and Larpenteur bridges, and replacement of the I-35E mainline bridges at Roselawn, County Road B and Highway 36.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2012

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 73.6	\$ 98.4
Other Construction Elements:	\$ 0.0	\$ 4.0
Engineering:	\$ 18.4	\$ 8.5
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 92.0</b>	<b>\$ 110.9</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Recent Changes and Updates

2017 is the second year this project has been substantially complete and will not be in next year's report. This project was primarily complete in December 2015.

## Project History

The MnPASS System II study identified I-35E north of St. Paul as the top candidate for the region's next MnPASS facility due to congestion levels, transit demand, and the opportunity to coordinate construction with the I-35E/Cayuga bridge and pavement project (SP 6280-308). The Current Estimate increased in 2013 when the design-build contract was let. The construction letting of \$98.4 million is reflected in the current estimate.

## Key Cost Estimate Assumptions

Standard practices were used to develop cost estimates for this project.

## Project Risks

Major risks have been retired.

## Schedule

Environmental Approval Date: 03/01/2013  
 Municipal Consent Approval Date: 02/20/2013  
 Geometric Layout Approval Date: 2/12/2013  
 Construction Limits Established Date: 02/12/2013  
 Original Letting Date: 06/14/2013  
 Current Letting Date: 10/01/2013  
 Construction Season: 2014/2015  
 Estimated Substantial Completion: 12/15/2015



Minnesota Department of Transportation  
 District M  
 1500 West County Road B2  
 (651) 234-7500

**District Engineer:** Scott McBride  
**Project Manager:** Dale Gade

**Revised Date:** 12/15/2016

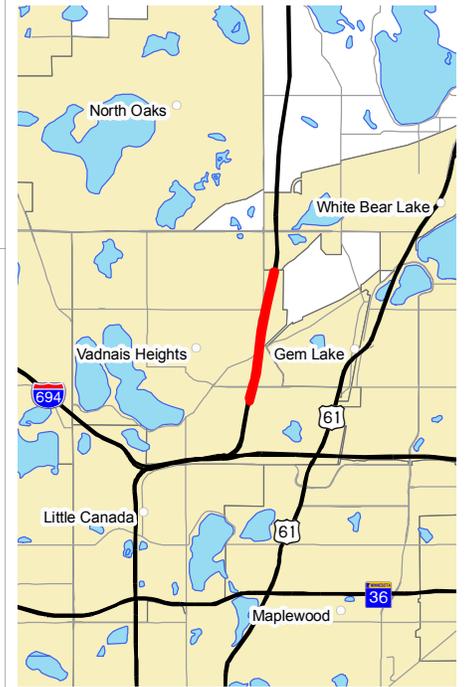
# PROJECT SUMMARY

I-35E

Vadnais Heights and White Bear Lake - Goose Lake Road Bridges  
 Bridge 9567, (new, 62729), &, 9568, (new, 62730)

State Project No. 6281-25

<http://www.dot.state.mn.us/metro/projects/i35vadnaisheights/index.html>



## Primary Purpose

Performance-based needs: Bridge Condition  
 Performance-based needs: Pavement Condition

## Investment Category

\*This project was designed and scoped before the current highway investment plan MnSHIP was developed, which breaks projects into investment categories.

## Project Description

The project replaces the Goose Lake Road bridges including profile adjustments on both sides of the bridges, mill and unbonded concrete overlay, ADA, retaining walls, ponding, guardrail, drainage and transportation management system improvements.

## Recent Changes and Updates

This project is open to traffic but there continues to be minor work and intermittent lane closures which continue into the fall of 2017. There have been no cost changes since the 2015 Major Highway Projects Report.

## Project History

The I-35E bridges over Goose Lake Road and the BNSF railroad in Vadnais Heights are being replaced with new wide structures to accommodate three lanes of traffic and also includes profile adjustments of pavement on both sides of the bridges. In addition there is pavement work, drainage, traffic management systems, guardrail, retaining walls and ADA improvements.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2012

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 10.1	\$ 22.4
Other Construction Elements:	\$ 0.4	\$ 0.3
Engineering:	\$ 2.1	\$ 4.0
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 12.5</b>	<b>\$ 26.7</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

Cost increases in construction letting from 2014 to 2015 are \$2 million and are a result of railroad agreement costs, changing the pavement fix, and bridge clearance. From 2013 to 2014, the project costs increased from \$10.1 million to \$20 million due to a mill and concrete overlay project being included, as well as preparing the bridges and pavement to be ready for a MnPASS extension into this area. There were efficiency and cost savings in combining the bridge and pavement project as well as the MnPASS project (which is a separate entry in this report).

## Project Risks

Project is now open, with minor work continuing and some risk with traffic impacts remains.

## Schedule

Environmental Approval Date: 3/16/2015  
 Municipal Consent Approval Date: not needed  
 Geometric Layout Approval Date: 12/2014  
 Construction Limits Established Date: 12/2014  
 Original Letting Date: 01/23/2015  
 Current Letting Date: 06/05/2015  
 Construction Season: 2015/2016  
 Estimated Substantial Completion: 12/02/2016



Minnesota Department of Transportation  
 District M  
 1500 West County Road B2  
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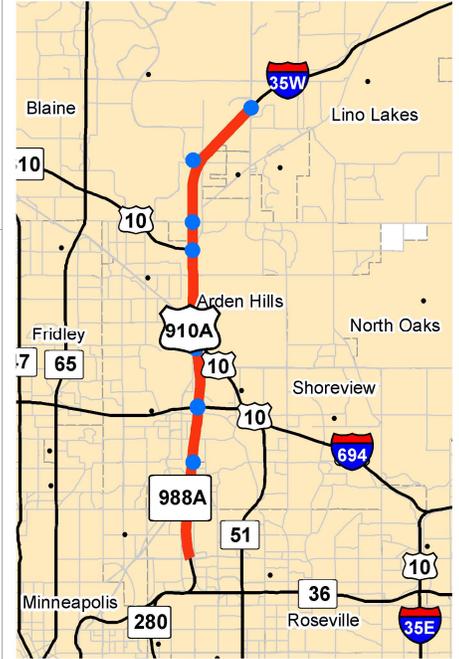
**District Engineer:** Scott McBride  
**Project Manager:** Mohammad Dehdashti  
**Revised Date:** 12/15/2016

# PROJECT SUMMARY

I-35W

Roseville to Hwy 10

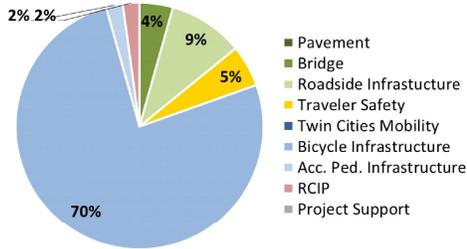
Bridge 02550, 02566, 02571, 62732, 62873, 62890, 62911, 62938, 62939, 62940, 62941, 62942, 91071, 9355, 9357, 9492, 9578, 9601, 9602, 9605, 9604, 9831



## Primary Purpose

Twin Cities Mobility: Managed Lanes  
 Performance-based need: Pavement condition  
 Performance-based need: Bridge Condition

## Investment Category



## Project Description

This project will add managed lanes (MnPASS) and spot mobility improvements on I-35W from Roseville to Blaine, provide a long-term pavement fix, repair 21 bridges and improve roadside infrastructure.

## Recent Changes and Updates

There have been no changes to the Total Project Cost Estimate since 2016. Construction may stretch into a fourth season, but early traffic control work, including traffic cross-overs and shoulder work might start in the fall of calendar year 2018 so that major work can begin quickly during the 2019 construction season.

## Project History

2016 was the first year this project is included in the Major Highway Projects Report.

I-35W connects greater Minnesota and the northern Twin Cities suburbs to downtown Minneapolis and is an important freight corridor. With an average of 53,000 to 127,000 vehicles driving on the highway per day, congestion levels vary throughout the day. Managed or MnPASS lanes on I-35W between Hwy 36 and Lexington Avenue are needed to improve capacity, mobility and reliable travel times. In addition to the MnPASS lanes, a long-term pavement fix will eliminate the need to do short term pavement fixes every 7-8 years in the corridor, and more than 16 bridges will be improved to meet current height clearance for freight vehicles.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2017

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 208.0	\$ 208.0
Other Construction Elements:	\$ 6.1	\$ 6.1
Engineering:	\$ 3.6	\$ 3.6
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 217.7</b>	<b>\$ 217.7</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

Quantities based estimate from staff approved layout.

## Project Risks

The project risks include possible utility relocation, flooding and water quality mitigation.

## Schedule

Environmental Approval Date: pending  
 Municipal Consent Approval Date: 12/15/2016  
 Geometric Layout Approval Date: 04/2016  
 Construction Limits Established Date: 04/2016  
 Original Letting Date: 08/17/2018  
 Current Letting Date: 09/12/2018  
 Construction Season: 2019/2021  
 Estimated Substantial Completion: 11/01/2022



Minnesota Department of Transportation  
 District M  
 1500 West County Road B2  
 (651) 234-7500

District Engineer: Scott McBride  
 Project Manager: Jerome Adams

Revised Date: 12/15/2016

# PROJECT SUMMARY

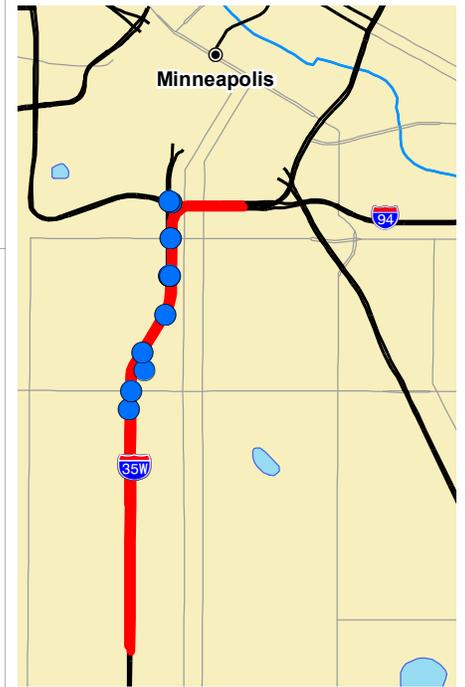
I-35W

43rd Street to I-94 Commons

Bridge 9731, 9733, 27842, 27843, 27867, 27868, 27869, 27870, 27871, 27872

State Project No. 2782-327

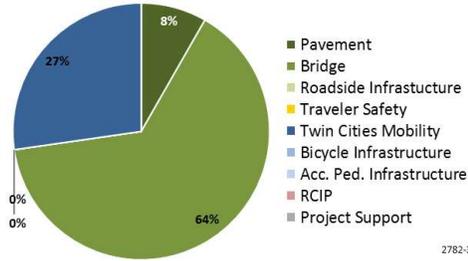
<http://www.35lake.com/>



## Primary Purpose

Twin Cities Mobility: Managed Lanes  
Performance-based Need: Bridge and Pavement Condition

## Investment Category



## Project Description

Adjust the alignment of I-94, I-35, and Highway 65. Replace the following bridges: 40th Street pedestrian, 31st Street, Lake Street, Midtown Greenway, 28th Street, 26th Street, 24th Avenue pedestrian bridge, Southbound Braid, Franklin Ave, Northbound Flyover, and Hwy 65 over I-94. Repair bridges at 38th Street, 1st Avenue, and Portland Avenue. Replace all pavements on I-35W from 43rd Street into I-94 Commons. The project will also construct an on-line transit station on I-35W at Lake Street to improve transit access and add access from northbound I-35W to 28th Street and southbound I-35W to Lake Street to improve access into the Lake Street business district.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2013

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 265.5	\$ 239.0
Other Construction Elements:	\$ 0.0	\$ 28.4
Engineering:	\$ 44.5	\$ 46.4
Right of Way:	\$ 3.6	\$ 3.6
<b>Total:</b>	<b>\$ 313.6</b>	<b>\$ 317.4</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Recent Changes and Updates

Changes in 2017 include removing the stormwater caverns portion of this project to be a separate project (SP 2782-347). Other construction elements were reduced to \$28.4 million in part due to the stormwater tunnel project split off. Engineering cost estimate was reduced from last year by \$0.5 million. Competitive bids resulted in a construction letting bid of \$239 million (designer estimate was \$242 million).

## Project History

Changes in 2016 included confirmation of funding sources from project partners. Some funding for the transit portion of this project was expected to come from an FTA Small Starts grant. There was a local match with an increased contribution from Hennepin County, Metropolitan Council and the Counties Transit Investment Board in August 2016 to apply for a Small Starts grant. Public involvement is ongoing.

Changes in 2015 included an increase to the construction letting which is from an increased local share of funding that previously had been attributed to MnDOT's contribution, but now has been clarified as local share.

## Key Cost Estimate Assumptions

The baseline estimate includes the MnDOT portion (\$183 million). This large project is done in partnership with Minneapolis, Hennepin County and the Metropolitan Council. The current estimate includes funding from all project partners. The Construction Letting amount includes over \$82 million in local funding from the City of Minneapolis, Hennepin County, Metro Transit, Metropolitan Council and CTIB. Other Construction Elements include utility agreements and Post Letting Costs for overruns, incentives, and construction traffic management.

## Project Risks

Storm water tunnels and drainage present a potential project risk; that portion of the project is now an separate project. Traffic impacts during construction will be a major project risk. Temporary lanes are being added to I-394 and MN 62 to help mitigate traffic concerns.

## Schedule

Environmental Approval Date: Spring 2016  
Municipal Consent Approval Date: Spring 2016  
Geometric Layout Approval Date: 10/19/2015  
Construction Limits Established Date: November 28, 2015  
Original Letting Date: 07/21/2017  
Current Letting Date: 06/28/2017  
Construction Season: 2017/2021  
Estimated Substantial Completion: 11/01/2021



Minnesota Department of Transportation  
District M  
1500 West County Road B2  
(651) 234-7500

**District Engineer:** Scott McBride  
**Project Manager:** Scott Pedersen

**Revised Date:** 12/15/2016

# PROJECT SUMMARY

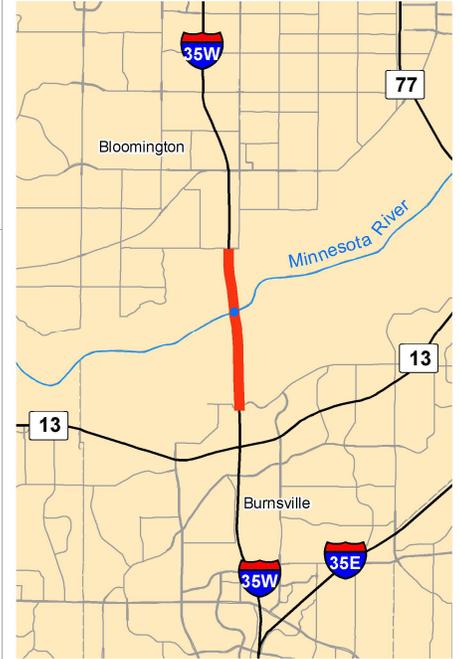
I-35W

Minnesota River Crossing (Bloomington and Burnsville)

Bridge 5983, 9043, 9044

State Project No. 1981-124

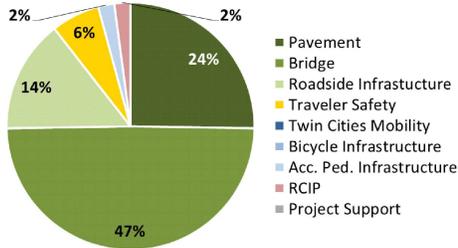
<http://www.dot.state.mn.us/metro/projects/i35wbloomington/index.html>



## Primary Purpose

Performance-based need: Bridge Condition

## Investment Category



## Project Description

This project includes bridge replacements, pavement reconstruction, auxiliary lanes, signing, lighting, traffic management system, trails, drainage, and guardrail on I-35W from the Cliff Road interchange to the 106th Street interchange, in the cities of Burnsville and Bloomington within Hennepin and Dakota counties. An off-road trail will also be added for pedestrian and bicycle crossing of the Minnesota River.

## Recent Changes and Updates

This project has been advanced from 2020 to 2018 in the 2018-2021 STIP, and is receiving additional funds from the Chapter 3 State Road Construction bond program from the 2017 MN Legislative session. In addition, a profile correction will bring the approaches out of the flood plain and the scope of work now includes the 106th St bridges (mainline). Costs have increased since the baseline estimate due to the inclusion of the profile correction and 106th St bridges, even though advancing the project reduces two years of inflation. It will be delivered with the design-build delivery method.

## Project History

Project entered the Major Highway Projects Report in 2016. In 2009, lane re-configuration allowed for High Occupancy Toll lanes but reduced the existing shoulders on the bridge. This project will widen the bridge to allow for shoulder lanes and add auxiliary lanes in each direction to manage traffic weaving between the 106th Street and the Cliff Road interchanges. An off-road trail will also be added for pedestrian and bicycle crossing of the Minnesota River.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2017

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 134.0	\$ 140.0
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 22.4	\$ 22.4
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 156.4</b>	<b>\$ 162.4</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

Standard practices were used to develop estimates for this project.

## Project Risks

Risks include municipal consent from two cities, right of way and environmental impacts.

## Schedule

Environmental Approval Date: pending approval  
 Municipal Consent Approval Date: pending approval  
 Geometric Layout Approval Date: pending approval  
 Construction Limits Established Date: pending approval  
 Original Letting Date: 06/14/2020  
 Current Letting Date: 05/09/2018  
 Construction Season: 2018/2020  
 Estimated Substantial Completion: 11/25/2021



Minnesota Department of Transportation  
 District M  
 1500 West County Road B2  
 (651) 234-7500

District Engineer: **Scott McBride**  
 Project Manager: **Scott Pedersen**

Revised Date: 12/15/2016

# PROJECT SUMMARY

I-94

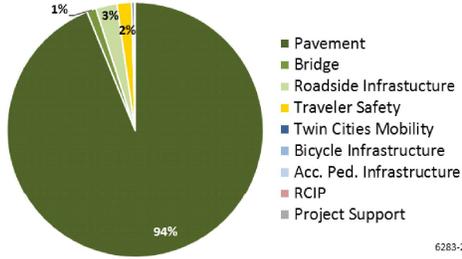
I-94 (Mounds Blvd to Hwy 120) and Hwy 61 (Burns Avenue to Hwy 5)  
 Bridge 9147, 9148, 62706, 62838, 62861, 62862, 62868, 62869, and, 62870  
 State Project No. 6283-234  
<http://www.dot.state.mn.us/metro/projects/i94stpaul/>



## Primary Purpose

Performance-based Need: Pavement  
 Condition Performance-based Need: Bridge  
 Condition

## Investment Category



6283-234

## Project Description

This project is for an unbonded concrete overlay on I-94 from Mounds Boulevard to east of Ruth Street, a bituminous resurfacing to east of Highway 120 and on Highway 61 north of Mounds Boulevard, an application of white topping. Repair of nine bridges, signals, signing, lighting, guardrail, concrete median barrier, drainage, traffic management system, and ADA are also included.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2012

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 32.5	\$ 43.3
Other Construction Elements:	\$ 0.0	\$ 0.2
Engineering:	\$ 6.5	\$ 8.4
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 39.0</b>	<b>\$ 51.9</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Recent Changes and Updates

This project is currently under construction and is expected to be complete in November 2017. There have been no changes to the Total Project Cost Estimate since the 2015 Major Highway Projects Report.

## Project History

This project's construction costs increased in 2015 from \$32 million to \$43.3 million, a result of a number of project changes. A portion of the project, Mounds Blvd. to White Bear Ave, was changed to a long-term pavement fix, from a bituminous mill and overlay to concrete work. In addition to the increased costs from this change of material and substructure treatment, costs were also affected because the concrete work triggered raising the profile of road and ramps in that area. Other changes include adding a median barrier, improvements to storm sewer curbs and gutters, slope work, on-street bike/pedestrian trails, ADA and signal improvements, and work being done on the cross street-Hwy 120. Increased costs for the pavement project are being funded from a cost savings from a mill and overlay project on I-35W in Roseville and from the Congestion Mitigation Safety Program.

## Key Cost Estimate Assumptions

A down-scoped project provided additional state and federal funding which resulted in this project having a longer life cycle pavement repair. Traffic Control Mitigation was increased to \$2 million. Water Resources cost estimate was increased by \$2.54 million.

## Project Risks

This project will have a large traffic impact to a congested interstate in downtown Saint Paul.

## Schedule

Environmental Approval Date: 05/14/2015  
 Municipal Consent Approval Date: not needed  
 Geometric Layout Approval Date: 05/14/2015  
 Construction Limits Established Date: 05/14/2015  
 Original Letting Date: 11/20/2015  
 Current Letting Date: 11/20/2015  
 Construction Season: 2016/2017  
 Estimated Substantial Completion: 11/01/2017



Minnesota Department of Transportation  
 District M  
 1500 West County Road B2  
 (651) 234-7500

District Engineer: Scott McBride  
 Project Manager: Steve Kordosky

Revised Date: 12/15/2016

# PROJECT SUMMARY

I-94

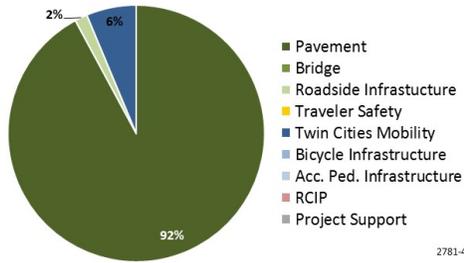
Nicollet Avenue in Minneapolis to Shingle Creek Bridge in Brooklyn Center  
 Bridge multiple, bridges, (50+)  
 State Project No. 2781-432  
<http://www.dot.state.mn.us/metro/projects/i94brooklyncntr/>



## Primary Purpose

Performance-based Need: Pavement Condition  
 Performance-based Need: Bridge Condition

## Investment Category



## Project Description

The project includes concrete pavement repair and diamond grinding south of Highway 55, bituminous overlay north of Highway 55, drainage and slope repair, Lowry Tunnel tile repair, Portland Tunnel joint repair, bridge redeck of westbound I-94 over southbound Highway 252, and miscellaneous repair of 49 bridges.

In 2016, the cost increased due to adding \$6 million of lighting work throughout the nine-mile corridor. Advancing the lighting work to coincide with the pavement and bridge project in 2017 reduced impact on this highly-traveled corridor.

## Recent Changes and Updates

In 2017, the cost increased by \$3 million from last year's report due to the lowest bid for the construction letting was \$3 million greater than the project estimate. Minor construction will extend into 2018. Engineering costs have remained at \$8.2 million since 2016.

## Project History

In 2015, the cost increased due to traffic control mitigation and bridge changes to the project. A Value Engineering study conducted in 2015 recommended bituminous overlay replace the concrete pavement repair on mainline I-94, north of Hwy 55. This significantly reduced traffic impacts and enabled the pavement construction to take place in 2017 to avoid other major roadway projects in 2018 in the Metro. The TPCE in 2015 was \$48.3 million. In the 2014 MHPR, costs increased from the baseline estimate by \$14.2 million and letting date was moved because of a project revision request in 2013 that added 48 bridge maintenance activities. Pavement inspections also showed more severe pavement degradation than expected.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2013

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 23.4	\$ 46.3
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 2.3	\$ 8.2
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 25.7</b>	<b>\$ 54.5</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

Concrete pavement rehabilitation, traffic mitigation, bridge cost and scope are based on December 2014 bridge recommendations.

## Project Risks

The potential for a significant event (i.e. 2018 Superbowl) may require an accelerated schedule for design and construction. There will be major impact to traffic during the construction period for the project.

## Schedule

Environmental Approval Date: 2016  
 Municipal Consent Approval Date: not needed  
 Geometric Layout Approval Date: 2016  
 Construction Limits Established Date: 2016  
 Original Letting Date: 06/14/2013  
 Current Letting Date: 02/03/2017  
 Construction Season: 2017/2018  
 Estimated Substantial Completion: 07/01/2018



Minnesota Department of Transportation  
 District M  
 1500 West County Road B2  
 (651) 234-7500

**District Engineer:** Scott McBride  
**Project Manager:** April Crockett

**Revised Date:** 12/15/2016

# PROJECT SUMMARY

I-494

I-394 in Minnetonka to I-94/494/694 in Maple Grove  
Bridge NA

State Project No. 2785-330

<http://www.dot.state.mn.us/metro/projects/i494plymouth/>

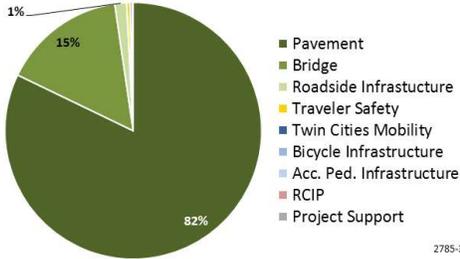
**Substantially Complete**



## Primary Purpose

Twin Cities Mobility: Managed Lanes  
Performance-based Need: Pavement

## Investment Category



## Project Description

The project adds a general purpose lane between Highway 55 and I-94/I-694, adds an auxiliary lane northbound between I-394 and Carlson Parkway, and adds auxiliary lanes between Highway 55 and County Road 6. It also includes pavement resurfacing and reconstruction, ponds, noisewalls, signal revisions, lighting, traffic management system, bridge replacements and repairs.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2013

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 61.2	\$ 86.1
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 11.8	\$ 16.4
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 73.0</b>	<b>\$ 102.5</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Recent Changes and Updates

2017 is the first year this project was identified as substantially complete. The project costs have not changed since the 2014 Major Highway Projects Report.

## Project History

The project was open to traffic in November 2016. The project costs have not changed since the 2014 MHPR.

MnDOT received formal approval late in summer 2013 to construct a dynamic shoulder as part of this project. In 2014, the scope of the project was changed from the dynamic shoulder to adding a third general purpose lane between Hwy 55 and the I-494/I-694/I-94 interchange when additional funding was identified from savings on other construction projects. When the scope of the project changed from the addition of a dynamic shoulder on the outside to the addition of a general purpose lane on the inside, costs increased.

## Key Cost Estimate Assumptions

Standard practices were used to develop cost estimates.

## Project Risks

Construction substantially complete.

## Schedule

Environmental Approval Date: Spring 2014  
Municipal Consent Approval Date: Fall 2013  
Geometric Layout Approval Date: 8/22/2013  
Construction Limits Established Date: Spring 2013  
Original Letting Date: 07/28/2008  
Current Letting Date: 02/20/2015  
Construction Season: 2015/2017  
Estimated Substantial Completion: 06/30/2017



Minnesota Department of Transportation  
District M  
1500 West County Road B2  
(651) 234-7500

**District Engineer:** Scott McBride  
**Project Manager:** Chad Casey

**Revised Date:** 12/15/2016

## PROJECT SUMMARY

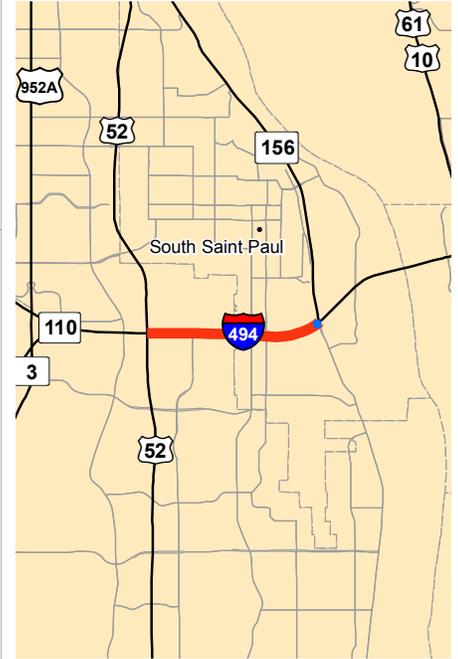
I-494

South St Paul to Inver Grove Heights

Bridge 19865

State Project No. 1985-149

<http://www.dot.state.mn.us/metro/projects/i494invergroveheights/>



### Primary Purpose

Twin Cities Mobility: Spot Mobility  
Improvement Performance-based need:  
Pavement Condition Performance-based need: Bridge Condition

### Investment Category

\*This project was designed and scoped before the current highway investment plan MnSHIP was developed, which breaks projects into investment categories.

### Project Description

The project includes construction of an auxiliary lane from Concord Street to Highway 52, concrete pavement repair, bridge repair and widening, drainage, retaining wall, ADA improvement, signing and lighting.

### Recent Changes and Updates

In 2017, the construction letting estimate increased due to the inclusion of additional sanitary and stormwater drainage (\$4.3 million), which is being funded by the Chapter 3 bonding from the 2017 Minnesota legislative session, which also allowed for moving the letting date from July 2019 to February 2019.

### Project History

This project was included in the MHPR for the first time in 2016.

Since 2013, this segment of roadway experiences one to two hours of daily congestion according to the annual Metropolitan Freeway System Congestion Report. The auxiliary lane will provide drivers an opportunity to speed up and slow down in a space not used by high-speed through traffic. Built in 1980, Bridge # 19865 has the original overlay and joints and the bridge overlay and joints have reached the expected useful life. The project will also improve the pavement condition. Because of the high impacts to traffic, construction to complete the roadway work and bridge will work at the same time.

### Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2017

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 15.8	\$ 20.2
Other Construction Elements:	\$ 0.0	\$ 0.6
Engineering:	\$ 2.9	\$ 2.9
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 18.7</b>	<b>\$ 22.7</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

### Key Cost Estimate Assumptions

Standard practices were used to develop cost estimates for this project

### Project Risks

Project has high traffic impacts, stormwater needs, and the sanitary sewers under the 5th and 7th Ave bridges may have impacts on design.

### Schedule

Environmental Approval Date: pending approval  
Municipal Consent Approval Date: not needed  
Geometric Layout Approval Date: pending approval  
Construction Limits Established Date: pending approval  
Original Letting Date: 07/26/2019  
Current Letting Date: 02/22/2019  
Construction Season: 2019  
Estimated Substantial Completion: 11/01/2019



Minnesota Department of Transportation  
District M  
1500 West County Road B2  
(651) 234-7500

**District Engineer:** Scott McBride  
**Project Manager:** Mohammad Dehdashti  
**Revised Date:** 12/15/2016

# PROJECT SUMMARY

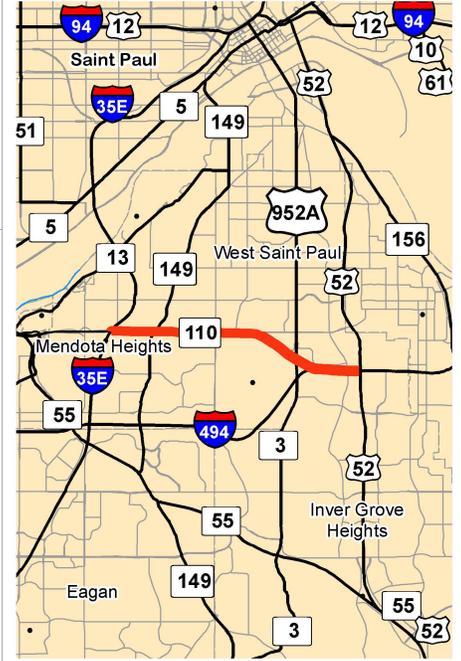
I-494

South St. Paul to Mendota Heights

Bridge 19823, 19824, 19878, 19897, 19898, 19899, 19900, 27765

State Project No. 1985-148

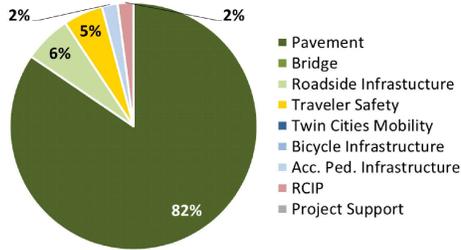
NA



## Primary Purpose

Performance-based need: Pavement Condition

## Investment Category



## Project Description

The project includes a mill and pavement overlay, drainage, repairs to eight bridges, guardrail, traffic management system (TMS), ADA and sidewalk repairs.

## Recent Changes and Updates

In 2017, the letting date was moved to Dec. 27, 2019. There was a cost increase of \$0.9 million due to moving the project out of the 2019 season to 2020.

## Project History

In 2016, eight bridges were added to the project and the 2016 estimate was \$32 million.

The condition of the pavement in this road section requires regular, heavy maintenance patching in areas, and the proposed work to the pavement should reduce this type of ongoing maintenance. The current pedestrian access routes are largely substandard and will be improved. Existing drainage infrastructure deficiencies identified include pipes, culverts, aprons, catch basins, or manholes in unacceptable conditions. Several in-place median guardrail installations don't meet current standards.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2017

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 17.5	\$ 26.1
Other Construction Elements:	\$ 0.0	\$ 1.3
Engineering:	\$ 2.9	\$ 4.6
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 20.6</b>	<b>\$ 32.0</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

Standard practices were used to develop cost estimates for this project.

## Project Risks

Previous project risks realized this past year included the late letting date triggering the project to move out of 2019 construction season, need for additional right of way for ADA work, and traffic control expected to be high cost.

## Schedule

Environmental Approval Date: pending approval  
 Municipal Consent Approval Date: not needed  
 Geometric Layout Approval Date: pending approval  
 Construction Limits Established Date: pending approval  
 Original Letting Date: 07/27/2018  
 Current Letting Date: 12/27/2019  
 Construction Season: 2020  
 Estimated Substantial Completion: 11/01/2020



Minnesota Department of Transportation  
 District M  
 1500 West County Road B2  
 (651) 234-7500

District Engineer: **Scott McBride**  
 Project Manager: **Mohammad Dehdashti**  
 Revised Date: 12/15/2016

# PROJECT SUMMARY

I-694

Little Canada to Arden Hills

Bridge 62723

State Project No. 6285-143

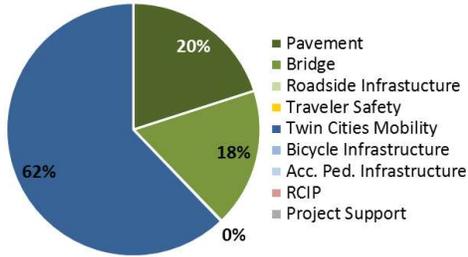
<http://www.dot.state.mn.us/enhance694/>



## Primary Purpose

Regional & Community Improvement Priority:  
Corridors of Commerce Project, Metro  
Capacity Development

## Investment Category



## Project Description

The project is for the construction of a general purposed lane on I-694 from Rice Sreet in Little Canada to Lexington Avenue in Arden Hills and for the reconstruction of existing lanes, low slump overlay on the Island Lake Channel bridge, noisewall and median barrier construction.

## Recent Changes and Updates

The project is currently under construction and is expected to be complete in November 2017. The current Total Project Cost Estimate reflects a construction bid that was less than the construction estimate. Engineering costs were reduced since the Baseline Estimate.

## Project History

The project was selected for the Corridors of Commerce program in 2013. The project initially included a dynamic shoulder lane but was changed to add a general purpose lane. The project adds a third general purpose lane in each direction between Rice Street and Lexington Avenue. There is pavement reconstruction between Rice Street and Lexington Avenue, rebuilding interstate ramps at three locations, and improving storm water drainage throughout the corridor.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2014

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 42.2	\$ 39.5
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 7.8	\$ 7.0
Right of Way:	\$ 1.5	\$ 1.5
<b>Total:</b>	<b>\$ 49.5</b>	<b>\$ 48.0</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

Standard practices were used to develop cost estimates for this project. Increased construction staging costs are due to traffic control during construction.

## Project Risks

Right of way required for water treatment and to build stormwater ponds.

## Schedule

Environmental Approval Date: 10/2014  
Municipal Consent Approval Date: 12/2014  
Geometric Layout Approval Date: 02/01/2014  
Construction Limits Established Date: 02/01/2014  
Original Letting Date: 06/12/2015  
Current Letting Date: 11/20/2015  
Construction Season: 2016/2017  
Estimated Substantial Completion: 11/01/2017



Minnesota Department of Transportation  
District M  
1500 West County Road B2  
(651) 234-7500

**District Engineer:** Scott McBride  
**Project Manager:** Mark Lindeberg

**Revised Date:** 12/15/2016

# PROJECT SUMMARY

Hwy 100

36th Street to 25 1/2 Street in St. Louis Park

Bridge 5308, 5309, 5462, 5598,

State Project No. 2734-33

<http://www.dot.state.mn.us/metro/projects/hwy100slp/>

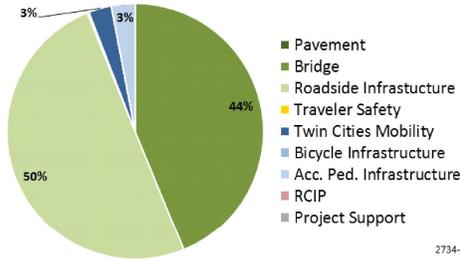
**Substantially Complete**



## Primary Purpose

Twin Cities Mobility: Spot Mobility  
Improvement Performance-based Need:  
Roadside Infrastructure Condition

## Investment Category



2734-33

## Project Description

Freeway and interchange reconstruction from West 36th Street to Cedar Lake Rd. Replace bridges, grading, surfacing, drainage, utilities, noise and retaining walls, and installation of traffic management cameras.

## Recent Changes and Updates

2017 is the first year this project is identified as substantially complete. Construction began in August of 2014. The current estimate has not changed since the 2014 MHP reports. Substantial progress was made and the project is on track to be complete in November.

## Project History

This project reconstructs Hwy 100 at the Hwy 7 and Minnetonka Boulevard interchanges in St. Louis Park and also widens the road to include three lanes in each direction for improved capacity. A reduction in scope and retirement of risk and contingency release were reported as the reasons for a reduced project's estimated costs in previous MHP reports.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2012

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 60.0	\$ 44.0
Other Construction Elements:	\$ 4.0	\$ 3.6
Engineering:	\$ 13.0	\$ 9.3
Right of Way:	\$ 3.0	\$ 4.5
<b>Total:</b>	<b>\$ 80.0</b>	<b>\$ 61.4</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Key Cost Estimate Assumptions

Standard practices were used to development estimates for this project, reduced scope design standards.

## Project Risks

This project is complete, no risks remain.

## Schedule

Environmental Approval Date: 06/10/2013  
Municipal Consent Approval Date: 12/03/2012  
Geometric Layout Approval Date: 9/17/2013  
Construction Limits Established Date: 08/15/2012  
Original Letting Date: 07/08/2015  
Current Letting Date: 05/16/2014  
Construction Season: 2014/2016  
Estimated Substantial Completion: 11/01/2016



Minnesota Department of Transportation  
District M  
1500 West County Road B2  
(651) 234-7500

District Engineer: **Scott McBride**  
Project Manager: **Andrew Lutaya**

Revised Date: 12/15/2016

# PROJECT SUMMARY

Hwy 101

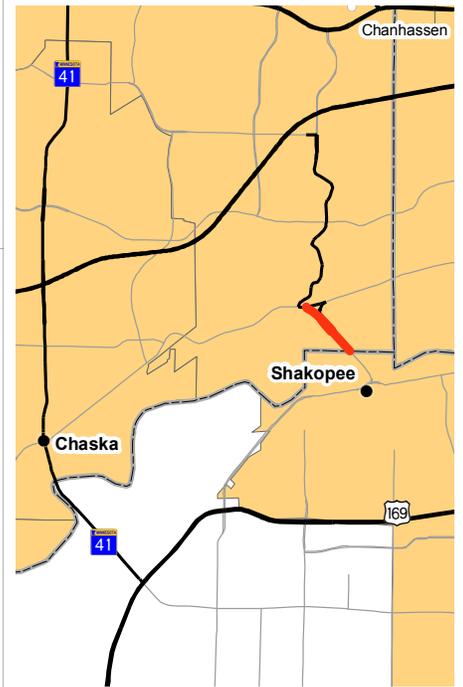
Minnesota River Bridge in Shakopee to Hwy 61 in Chanhassen

Bridge 10004

State Project No. 1009-24

<http://www.dot.state.mn.us/metro/projects/hwy101river/index.html>

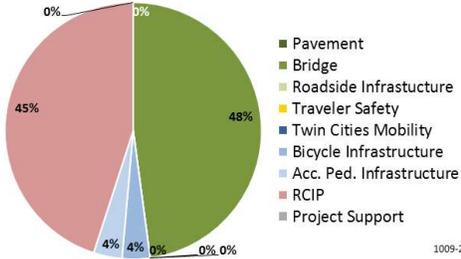
**Substantially Complete**



## Primary Purpose

Performance-based Need: Bridge & Flood Mitigation

## Investment Category



1009-24

## Project Description

Construction of a new Hwy 101 bridge over the floodplain, above the 100-year flood elevation, between the existing Hwy 101 Minnesota River bridge in Shakopee at County Road 61/Flying Cloud Drive in Chanhassen. Carver County is the project lead. Project now includes work on Flying Cloud Drive and a roundabout at the intersection of Hwy 101 and Flying Cloud Drive.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2012

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 42.0	\$ 49.3
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 4.2	\$ 4.2
Right of Way:	\$ 0.0	\$ 0.0
<b>Total:</b>	<b>\$ 46.2</b>	<b>\$ 53.5</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Recent Changes and Updates

2017 is the second year this project has been substantially complete and will not be in next year's report.

This project was complete in November 2015. Some additional activities, such as landscaping, extended into 2016. The current TPCE reflects a substantially complete project and should be considered the Actual Cost of the project. Additional costs for right of way and other incidentals may be expected.

## Project History

The project was let by Carver County and construction began in July 2014. MnDOT provided construction oversight activities as a contribution to the project and a lump sum payment of \$21.335 million.

## Key Cost Estimate Assumptions

State Aid standards and Project delivery process. 4,100-ft long bridge with a 10-ft trail on bridge. Hwy 101 to stay open to traffic during construction.

## Project Risks

Construction substantially complete.

## Schedule

Environmental Approval Date: 09/04/2013  
 Municipal Consent Approval Date: Not Needed  
 Geometric Layout Approval Date: Summer 2013  
 Construction Limits Established Date: 09/04/2013  
 Original Letting Date: 05/16/2014  
 Current Letting Date: 05/16/2014  
 Construction Season: 2014/2015  
 Estimated Substantial Completion: 11/23/2015



Minnesota Department of Transportation  
 District M  
 1500 West County Road B2  
 (651) 234-7500

**District Engineer:** Scott McBride  
**Project Manager:** Molly Kline

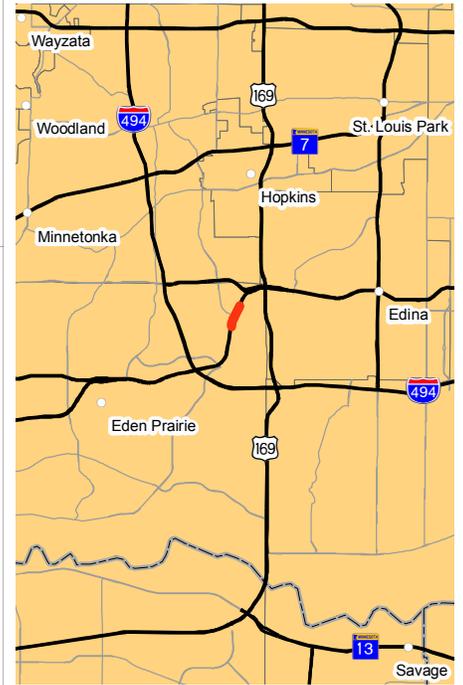
**Revised Date:** 12/15/2016

# PROJECT SUMMARY

Hwy 212  
 At Shady Oak Road in Eden Prairie  
 Bridge NA  
 State Project No. 2763-49

<http://www.edenprairie.org/community/infrastructure-projects/shady-oak-road>

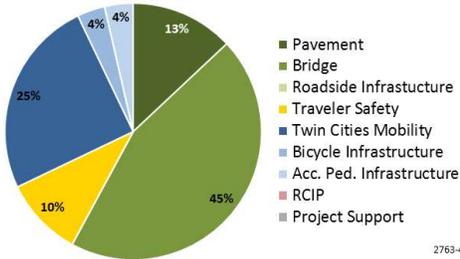
**Substantially Complete**



## Primary Purpose

Twin Cities Mobility: Spot Mobility  
 Improvement Performance-based Need:  
 Bridge Condition

## Investment Category



2763-49

## Project Description

Reconstruction of an existing local interchange for additional capacity.

## Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2013

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 23.2	\$ 23.2
Other Construction Elements:	\$ 0.1	\$ 0.1
Engineering:	\$ 4.9	\$ 4.9
Right of Way:	\$ 3.5	\$ 3.5
<b>Total:</b>	<b>\$ 31.7</b>	<b>\$ 31.7</b>

*Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.*

## Recent Changes and Updates

2017 is second year this project has been identified as substantially complete and will not be in next year's (2018) report.

The Current Estimate reflects a substantially complete project and should be considered the Actual Cost of the project. Additional costs for right of way and other incidentals may be expected.

## Project History

This locally-led project was complete in November 2015. The project reconstructed the existing diamond interchange to provide additional capacity on Shady Oak Road and improve access to Hwy 212. There was coordination with the City of Eden Prairie, MnDOT, and Southwest LRT. This was a locally-led project and received Transportation Economic Development funding of \$7.1 million in 2012, which comprised the extent of MnDOT's share of

## Key Cost Estimate Assumptions

Local governments provided cost estimates and engineering. MnDOT had oversight and review of project design.

## Project Risks

The project is complete and no risks remain.

## Schedule

Environmental Approval Date: Local Prep  
 Municipal Consent Approval Date: Not Needed  
 Geometric Layout Approval Date: 3/26/2013  
 Construction Limits Established Date: 3/26/2013  
 Original Letting Date: 08/15/2014  
 Current Letting Date: 05/15/2014  
 Construction Season: 2014/2016  
 Estimated Substantial Completion: 06/30/2016



Minnesota Department of Transportation  
 District M  
 1500 West County Road B2  
 (651) 234-7500

**District Engineer:** Scott McBride  
**Project Manager:** April Crockett

**Revised Date:** 12/15/2016

## **Appendix D: Future Major Highway Projects (planned 2021-2032)**

# Major Highway Projects (Planned 2021-2032)

District	Route	S.P.	Assigned Project Manager	Year	Location	Description	Environmental Document Status	Municipal Consent Status	Geometric Layout Approval Status	Construction Limits Status	Construction Letting Cost Estimate (in Millions)	Total Project Cost Estimate (in Millions)		
1	HWY2	3104-60, 3105-16	Randy Costley	2022	US 2 RP 186+00.904 to 211+00.366	**17NEW**SPP**ELLA**US 2, 0.4 MI. E. BRIDGE #1032 OVER PRAIRIE RIVER TO JCT MN 200. MEDIUM MILL & OVERLAY. (ASSOC. 3105-16, 0101-13)	NA	NA	NA	NA	\$9.7	\$14.1	\$12.8	\$18.4
1	HWY1	3101-38	Randy Costley	2022	MN 1 RP 188+00.000 to 207+00	MN 1, 0.5MI. N BASS LAKE RD TO 0.7 MI. S. JCT CR542/CR550/MN1 RECLAIM.	NA	NA	NA	NA	\$14.8	\$21.4	\$19.4	\$28.0
1	HWY27	0104-06, ASSOC 0903-29,0912-37	Derek Fredrickson	2021	MN 27 RP 221+00.259 to 231+00.365	MN 27 FR. N. JCT MN 65 TO AITKIN/CARLTON CO. LINE & N. JCT MN 73 TO W. LIMIT MOOSE LAKE & MN 73, IN KETTLE RIVER FR. W. JCT MN 27 TO 0.09 MI. S. CSAH 12/LOCKER MILL & OVERLAY.	NA	NA	NA	NA	\$2.7	\$3.8	\$5.5	\$5.0
1	HWY65	3609-41	Brian Larson	2021	MN65 254+00.760 to 270+00.739	MN 65 0.6 MI. S. CSAH 8 TO JCT US 71. OVERLAY.	NA	NA	NA	NA	\$4.2	\$6.0	\$5.5	\$7.9
1	HWY61	3804-41	Randy Costley	2022	MN61 RP 17+00.830 to 24+00.344	**SPP**MN 61 EXPRESSWAY NB&SB FROM 0.1 MI. N. KNIFE RIVER TO 0.32 MI. S CSAH 61. MILL & OVERLAY.	NA	NA	NA	NA	\$5.2	\$7.5	\$6.8	\$9.8
1	HWY61	1604-45, 1603-53	Brian Larson	2021	MN 61 RP 133+00.802 to 150+00.835	**ELLA**SPP** MN 61 FROM JCT RESERVATION BAY RD TO US/CANADIAN BORDER. BITUMINOUS DECLAMATION & M&O. (ASSOC. 1603-53)	NA	NA	NA	NA	\$9.1	\$13.2	\$11.9	\$17.2
1	I35	6982-318	Brian Larson	2022	I35 RP 249+00.062 to 251+00.753	**SPP** I 35, IN BROOKTON AT THOMPSON HILL, FROM 0.51 SO. BOUNDARY AVE. TO N END BRIDGE NO. 69879 OVER MN 23, RECONSTRUCT PAVEMENT.	NA	NA	NA	NA	\$11.7	\$16.9	\$15.3	\$22.1
1	I35	5807-30, ASSOC 5807-29, 5880-197, 3609-42, ASSOC 3113-07	Derek Fredrickson	2022	MN 23 RP 289+00.063 to 289+00.113	MN 23 OVER I-35, REPLACE BR#97918 & I-35 CONSTRUCT CROSS OVERS, GUARDRAIL AND GRADING FOR BR #97918 (ASSOC. 5880-197)	NA	NA	NA	NA	\$2.5	\$3.6	\$3.3	\$4.8
1	HWY65	3609-42	Doug Kerfeld	2022	MN 65 RP 213+00.832 to 254+00.760	MN 65 0.4 MI. S. CR 547 TO 0.3 MI. S. CSAH 8. RECLAIM & MILL & OVERLAY (ASSOC. 3113-07)	NA	NA	NA	NA	\$7.3	\$10.6	\$9.6	\$13.9
1	HWY73	6930-XXX	Not assigned	2022	Limits to be defined	Pavement Resurfacing from National Forest Development Road 111 to Highway 1	NA	NA	NA	NA	\$9.7	\$14.0	\$12.7	\$18.3
1	I35	5880-9790	Not assigned	2023	Limits to be defined	Replace the Northbound Bridge over the Burlington Northern Santa Fe Rail Road North of Highway 48	NA	NA	NA	NA	\$3.6	\$5.2	\$4.7	\$6.8
1	I35	5880-9789	Not assigned	2023	Limits to be defined	Replace the Southbound Bridge over the Burlington Northern Santa Fe Rail Road North of Highway 48	NA	NA	NA	NA	\$2.8	\$4.1	\$3.7	\$5.4
1	HWY2	6907-XXX, 6908-XXX	Not assigned	2023	Limits to be defined	Pavement resurfacing from West of County Road 874 to Highway 194	NA	NA	NA	NA	\$2.8	\$4.0	\$3.6	\$5.2
1	HWY61	6925-144, ASSOC 6926-54	Not assigned	2023	MN 61 NB & SB IN DULUTH FROM 0.3 MI N. SUPERIOR ST TO MCQUADE RD/CSAH 33. M&O (ASSOC. 6926-54)	NA	NA	NA	NA	\$4.0	\$5.7	\$5.2	\$7.5	
1	HWY61	3808-XXX, 1601-XXX	Not assigned	2023	Limits to be defined	Pavement Resurfacing from North of County Road 6 to South of County Road 79	NA	NA	NA	NA	\$7.4	\$10.6	\$9.7	\$13.9
1	HWY23	5807-XXX, 5809-XXX	Not assigned	2023	Limits to be defined	Pavement Resurfacing from I-35 to Main Street in Askov	NA	NA	NA	NA	\$4.0	\$5.7	\$5.2	\$7.5
1	HWY23	0901-81	Not assigned	2023	MN 23, 0.4 MILE EAST OF THE PINE-CARLTON COUNTY LINE TO THE SAINT LOUIS RIVER BRIDGE. MILL/OVERLAY	NA	NA	NA	NA	\$10.3	\$14.9	\$13.5	\$19.5	
1	HWY23	6910-XXX	Not assigned	2023	Limits to be defined	Pavement Resurfacing from Northeast of 130th Avenue to North of Highway 39	NA	NA	NA	NA	\$3.5	\$5.1	\$4.6	\$6.7
1	HWY73	6930-XXX	Not assigned	2023	Limits to be defined	Pavement Resurfacing from County Road 66 (13th Street Northwest) to National Forest Development Road 111	NA	NA	NA	NA	\$3.3	\$4.8	\$4.4	\$6.3
1	HWY194	6932-XXX	Not assigned	2023	Limits to be defined	Pavement Resurfacing from Highway 2 to West of Highway 53	NA	NA	NA	NA	\$3.2	\$4.6	\$4.1	\$6.0
1	HWY53	6917-XXX	Not assigned	2024	Limits to be defined	Pavement Resurfacing Northbound from North of Highway 33 to South of County Road 52	NA	NA	NA	NA	\$6.1	\$8.9	\$8.0	\$11.6
1	HWY169	6935-XXX	Not assigned	2024	Limits to be defined	Pavement Resurfacing Northbound, from South of County Road 67 to West of County Road 109	NA	NA	NA	NA	\$6.8	\$9.8	\$8.9	\$12.9
1	HWY169	6935-XXX	Not assigned	2024	Limits to be defined	Pavement Resurfacing Southbound from South of County Road 5 to West of County Road 109	NA	NA	NA	NA	\$3.9	\$5.6	\$5.1	\$7.4
1	HWY194	6933-XXX	Not assigned	2024	Limits to be defined	Pavement Resurfacing Northbound and Southbound, in Duluth, from East of Highway 53 (Trinity Road) to North of Mesaba Avenue	NA	NA	NA	NA	\$3.9	\$5.6	\$5.0	\$7.3
1	I35	6982-XXX	Not assigned	2024	Limits to be defined	Concrete Pavement Restoration Northbound and Southbound, in Duluth, from Lake Avenue to Highway 65	NA	NA	NA	NA	\$4.7	\$6.8	\$6.2	\$8.9
1	HWY65	0111-27	Not assigned	2023	MN 65 RP 105+00.179 to 116+00.649	MN 65 FROM N. JCT MN 27 TO E.JCT MN 210. M&O	NA	NA	NA	NA	\$5.9	\$8.6	\$7.8	\$11.3
1	HWY65	0112-XXX	Not assigned	2024	Limits to be defined	Pavement Resurfacing from West of Highway 210 to South of the Sandy River	NA	NA	NA	NA	\$5.9	\$8.5	\$7.7	\$11.1
1	HWY2	3103-XXX	Not assigned	2025	Limits to be defined	Pavement Resurfacing Eastbound and Westbound, in Grand Rapids, West of 19th Avenue Northwest to East of Highway 269	NA	NA	NA	NA	\$3.6	\$5.1	\$4.7	\$6.7
1	HWY53	6918-XXX, 6919-XXX	Not assigned	2025	Limits to be defined	Pavement Resurfacing from 12th Ave West in Virginia to North of Wayside Rest	NA	NA	NA	NA	\$5.5	\$7.9	\$7.2	\$10.4
1	HWY11	3605-XXX	Not assigned	2025	Limits to be defined	Pavement Resurfacing in International Falls, from West of County Road 332 to 12th Ave	NA	NA	NA	NA	\$5.2	\$7.5	\$6.8	\$9.9
1	HWY61	6925-XXX	Not assigned	2025	Limits to be defined	Pavement Resurfacing Northbound and Southbound, in Duluth, from 28th Avenue East to 60th Avenue East	NA	NA	NA	NA	\$3.4	\$4.9	\$4.4	\$6.4
1	HWY61	1601-6202	Not assigned	2025	Limits to be defined	Bridge Replacement Over the Two Island River	NA	NA	NA	NA	\$3.3	\$4.7	\$4.3	\$6.2
1	HWY210	0915-XXX	Not assigned	2025	Limits to be defined	Pavement Resurfacing from East End of the Bridge over Railroad to West of I 35	NA	NA	NA	NA	\$8.4	\$12.2	\$11.1	\$16.0
1	HWY38	3108-XXX	Not assigned	2025	Limits to be defined	Pavement Resurfacing from Highway 2 to North of County Road 49	NA	NA	NA	NA	\$3.2	\$4.6	\$4.2	\$6.1
1	HWY73	6927-XXX	Not assigned	2025	Limits to be defined	Pavement Resurfacing from North of County Road 86 to South Highway 2	NA	NA	NA	NA	\$4.5	\$6.4	\$5.8	\$8.4
1	HWY73	6929-XXX	Not assigned	2025	Limits to be defined	Pavement Resurfacing from North of bridge over the West Swan River to South of Highway 169, Dillon Road	NA	NA	NA	NA	\$5.3	\$7.7	\$7.0	\$10.0
1	HWY 135	6913-XXX	Not assigned	2025	Limits to be defined	Pavement Resurfacing from North of the Embarras River to Highway 1	NA	NA	NA	NA	\$6.8	\$9.8	\$8.8	\$12.8
2	Hwy 2	6004-26	LAURA HADRAVA	2022	EASTBOUND FROM HWY 32 TO ERSKINE	BITUMINOUS MILL & OVERLAY	Pending approval	Not needed	Not needed	Pending Approval	\$4.3	\$5.9	\$5.2	\$7.1
2	Hwy 75	3509-28	JEREMY HADRAVA	2022	FROM HALLOCK TO CANADIAN BORDER	BITUMINOUS MILL & OVERLAY & BRIDGE REPLACEMENT	Pending approval	Not needed	Not needed	Pending Approval	\$6.0	\$8.2	\$7.2	\$9.8
2	Hwy 92	1506-41	STEPHEN FRISCD	2022	FROM CR 35 TO HWY 200	BITUMINOUS RECLAIM	Pending approval	Not needed	Not needed	Pending Approval	\$3.6	\$4.8	\$4.3	\$5.0
2	Hwy 200	1504-15	RACHEL MILLER	2022	FROM MAHNDOMEN/CLEARWATER COUNTY LINE TO HWY 92	BITUMINOUS RECLAIM	Pending approval	Not needed	Not needed	Pending Approval	\$3.7	\$5.1	\$4.4	\$6.1
2	Hwy 59	N/A	N/A	2023	FROM BROOKS TO THIEF RIVER FALLS	BITUMINOUS MILL & OVERLAY	Pending approval	Not needed	Not needed	Pending Approval	\$5.4	\$7.4	\$6.5	\$8.9
2	Hwy 71	N/A	N/A	2023	FROM CR 22 TO BLACKDOCK	BITUMINOUS MILL & OVERLAY	Pending approval	Not needed	Not needed	Pending Approval	\$3.7	\$5.1	\$4.4	\$6.1
2	Hwy 87	N/A	N/A	2023	FROM HWY 71 TO BRIDGE OVER CROW WING RIVER	BITUMINOUS RECONSTRUCTION	Pending approval	Not needed	Not needed	Pending Approval	\$8.2	\$11.0	\$9.8	\$13.2
2	Hwy 89	N/A	N/A	2023	FROM NORTH RED LAKE INDIAN RESERVATION BORDER TO CR 44	BITUMINOUS MILL & OVERLAY	Pending approval	Not needed	Not needed	Pending Approval	\$4.1	\$5.5	\$4.9	\$6.6
2	Hwy 11	N/A	N/A	2024	FROM ROSEAU TO HWY 313	BITUMINOUS RECLAIM	Pending approval	Not needed	Not needed	Pending Approval	\$8.2	\$11.0	\$9.8	\$13.2
2	Hwy 11	N/A	N/A	2024	FROM CR 5 TO ROSEAU/LAKE OF THE WOODS COUNTY LINE	BITUMINOUS MILL & OVERLAY	Pending approval	Not needed	Not needed	Pending Approval	\$2.7	\$5.1	\$4.4	\$6.1
2	Hwy 32	N/A	N/A	2024	FROM MIDDLE RIVER TO GREENBUSH	BITUMINOUS RECLAIM	Pending approval	Not needed	Not needed	Pending Approval	\$7.0	\$9.4	\$8.4	\$11.3
2	Hwy 89	N/A	N/A	2024	FROM HWY 219 TO MARSHALL/ROSEAU COUNTY LINE	BITUMINOUS MILL & OVERLAY	Pending approval	Not needed	Not needed	Pending Approval	\$3.5	\$4.7	\$4.2	\$5.6
2	Hwy 92	N/A	N/A	2024	FROM GONVICK TO BAGLEY	BITUMINOUS MILL & OVERLAY	Pending approval	Not needed	Not needed	Pending Approval	\$6.4	\$8.6	\$7.7	\$10.3
2	Hwy 1	N/A	N/A	2025	OVER RED RIVER OF THE NORTH IN OSLO	BRIDGE REPLACEMENT	Pending approval	Not needed	Not needed	Pending Approval	\$7.7	\$10.4	\$9.2	\$12.5
2	Hwy 2	N/A	N/A	2025	OVER 4TH ST NW IN EAST GRAND FORKS	BRIDGE REPLACEMENT	Pending approval	Not needed	Not needed	Pending Approval	\$4.9	\$6.7	\$5.9	\$8.0
2	Hwy 71	N/A	N/A	2025	FROM PARK RAPIDS TO HWY 200	BITUMINOUS MILL & OVERLAY	Pending approval	Not needed	Not needed	Pending Approval	\$5.6	\$7.6	\$6.7	\$9.1
2	Hwy 75	N/A	N/A	2025	FROM DONALDSON TO HALLOCK	BITUMINOUS RECONSTRUCT, MILL & OVERLAY & BRIDGE REPLACEMENT	Pending approval	Not needed	Not needed	Pending Approval	\$5.8	\$7.8	\$7.0	\$9.4
2	Hwy 1	4509-05	N/A	2025	OVER THE RED RIVER IN OSLO	BRIDGE REPLACEMENT	Pending approval	Not needed	Not needed	Pending Approval	\$7.7	\$10.4	\$9.2	\$12.5
2	Hwy 2	N/A	N/A	2026	EASTBOUND FROM FOSSTON TO BAGLEY	BITUMINOUS MILL & OVERLAY	Pending approval	Not needed	Not needed	Pending Approval	\$4.4	\$6.0	\$5.3	\$7.2
2	Hwy 32	N/A	N/A	2026	IN FERTILE	URBAN RECONSTRUCT	Pending approval	Pending approval	Pending approval	Pending Approval	\$2.7	\$4.9	\$4.4	\$5.9
2	Hwy 59	N/A	N/A	2026	OVER RED LAKE RIVER IN THIEF RIVER FALLS	BRIDGE REPLACEMENT	Pending approval	Not needed	Not needed	Pending Approval	\$6.4	\$8.6	\$7.7	\$10.3
2	Hwy 72	N/A	N/A	2026	FROM LAKE OF THE WOODS/BELTRAMI COUNTY LINE TO CR 16	BITUMINOUS MILL & OVERLAY	Pending approval	Not needed	Not needed	Pending Approval	\$3.7	\$4.9	\$4.4	\$5.9

# Major Highway Projects (Planned 2021-2032)

District	Route	S.P.	Assigned Project Manager	Year	Location	Description	Environmental Document Status	Municipal Consent Status	Geometric Layout Approval Status	Construction Limits Status	Construction Letting Cost Estimate (in Millions)		Total Project Cost Estimate (in Millions)	
2	Hwy 75	N/A	N/A	2026	FROM NORMAN/KLAY COUNTY LINE TO HENDRUM	BITUMINOUS MILL & OVERLAY	Pending approval	Not needed	Not needed	Pending Approval	\$3.9	\$5.3	\$4.7	\$6.4
2	Hwy 200	N/A	N/A	2026	FROM LAPORTE TO HWY 371	BITUMINOUS RECLAIM	Pending approval	Not needed	Not needed	Pending Approval	\$4.2	\$5.6	\$5.0	\$6.7
2	Hwy 1	N/A	N/A	2027	FROM BELTRAM/CLEARWATER COUNTY LINE TO RED LAKE	BITUMINOUS MILL & OVERLAY	Pending approval	Not needed	Not needed	Pending Approval	\$5.3	\$7.1	\$6.4	\$8.5
2	Hwy 2	N/A	N/A	2027	WESTBOUND FROM FOSSTON TO BAGLEY	BITUMINOUS MILL & OVERLAY	Pending approval	Not needed	Not needed	Pending Approval	\$4.1	\$5.5	\$4.9	\$6.6
2	Hwy 2	N/A	N/A	2027	WESTBOUND FROM HWY 59 TO FOSSTON	BITUMINOUS MILL & OVERLAY	Pending approval	Not needed	Not needed	Pending Approval	\$4.0	\$5.4	\$4.8	\$6.5
2	Hwy 2	N/A	N/A	2027	EASTBOUND FROM EAST GRAND FORKS TO FISHER	BITUMINOUS MILL & OVERLAY	Pending approval	Not needed	Not needed	Pending Approval	\$4.2	\$5.6	\$5.0	\$6.7
2	Hwy 32	N/A	N/A	2027	FROM HWY 2 TO ST. HILAIRE	BITUMINOUS MILL & OVERLAY	Pending approval	Not needed	Not needed	Pending Approval	\$7.2	\$9.8	\$8.6	\$11.8
2	Hwy 71	N/A	N/A	2027	IN PARK RAPIDS	URBAN RECONSTRUCT	Pending approval	Pending approval	Pending approval	Pending Approval	\$6.8	\$9.2	\$8.2	\$11.0
2	Hwy 89	N/A	N/A	2027	FROM WANNASKA TO ROSSEAU	BITUMINOUS MILL & OVERLAY	Pending approval	Not needed	Not needed	Pending Approval	\$6.4	\$8.6	\$7.7	\$10.3
3	Hwy 25	8604-37	Felbaum	2022	MN 25 in Buffalo	Urban Reconstruction	N/A	N/A	N/A	N/A	\$4.4	\$6.0	\$5.3	\$7.2
3	Hwy 95	3006-41	Indihar	2022	MN 95 west of Cambridge	Cold In Place Recycle	N/A	N/A	N/A	N/A	\$5.2	\$7.0	\$6.2	\$8.4
3	MN271B	1814-08	Wehseber	2022	MN 371B in Brainerd	Reconstruction and mill and overlay	N/A	N/A	N/A	N/A	\$7.4	\$10.2	\$8.9	\$12.2
3	Hwy 10/Hwy	0509-91	Dumont	2022	West of St. Germain Street in St. Cloud to Benton/Sheburne Co line & Pedestrian Bridge in	Reconstruction and replacement of Bridges #9021 and #9022 over Hwy 10	N/A	N/A	N/A	N/A	\$24.9	\$33.7	\$29.9	\$40.4
3	I-94	8680-177	Dumont	2022	Wright CSAH 19 in Albertville	Replace WB Bridge 86817 and EB Bridge 86818	N/A	N/A	N/A	N/A	\$5.6	\$7.8	\$6.7	\$9.4
3	MN 18	0102-XX	TBD	2023	US 169 to MN 47	Bituminous resurfacing	N/A	N/A	N/A	N/A	\$4.8	\$6.5	\$5.8	\$7.8
3	US 169	4714-XX	TBD	2023	Mille Lacs Band Reservation to Garrison	Bituminous resurfacing	N/A	N/A	N/A	N/A	\$6.5	\$8.7	\$7.8	\$10.4
3	Hwy 23	4802-XX	Schiller	2023	Milaca to Groundhouse River east of Oghive	Bituminous Resurfacing	N/A	N/A	N/A	N/A	\$4.2	\$5.6	\$5.0	\$6.7
3	Hwy 25	1808-XX	Schiller	2023	Pierz to Morrison-Crow Wing County line	Bituminous Resurfacing	N/A	N/A	N/A	N/A	\$4.1	\$5.5	\$4.9	\$6.6
3	Hwy 95	3006-39	Dumont	2023	Fern Street to Davis Street in Cambridge	Urban reconstruction	N/A	N/A	N/A	N/A	\$6.0	\$8.1	\$7.2	\$9.7
3	Hwy 238	4913-XX	Dumont	2023	3rd Avenue in Upsala to MN 27	Bituminous resurfacing	N/A	N/A	N/A	N/A	\$5.7	\$7.7	\$6.8	\$9.2
3	Hwy 169	0116-XX	TBD	2024	MN 210 to MN 200	Bituminous resurfacing	N/A	N/A	N/A	N/A	\$13.2	\$17.9	\$15.8	\$21.5
3	Hwy 200	0105-XX	TBD	2024	Cass-Aikin County Line to MN 65	Bituminous resurfacing	N/A	N/A	N/A	N/A	\$9.3	\$12.6	\$11.2	\$15.1
3	Hwy 71	7319-XX	Dumont	2024	I-94 to North Sauk Centre	Urban Reconstruction	N/A	N/A	N/A	N/A	\$10.4	\$14.0	\$12.5	\$16.8
3	Hwy 71	7707-XX	Schiller	2024	North Sauk Centre to south Long Prairie	Cold In Place Recycle	N/A	N/A	N/A	N/A	\$6.8	\$9.2	\$8.2	\$11.0
3	Hwy 169	4811-XX	TBD	2024	Long Siding to 2 miles north of Pease	Bituminous resurfacing	N/A	N/A	N/A	N/A	\$4.9	\$6.7	\$5.9	\$8.0
3	Hwy 6	1103-XX	TBD	2024	Roosevelt Lake in Outing to MN 200 in Remer	Bituminous resurfacing	N/A	N/A	N/A	N/A	\$6.9	\$9.3	\$8.3	\$11.2
3	Hwy 23	0504-XX	Dumont	2024	West of Ronneby to west of Milaca	Bituminous Resurfacing	N/A	N/A	N/A	N/A	\$4.4	\$6.0	\$5.3	\$7.2
3	Hwy 23	4802-XX	Dumont	2024	Milaca	Urban Reconstruction	N/A	N/A	N/A	N/A	\$4.0	\$5.4	\$4.8	\$6.5
3	Hwy 65	3004-XX	TBD	2024	Cambridge to MN 107	Bituminous resurfacing	N/A	N/A	N/A	N/A	\$5.1	\$6.9	\$6.1	\$8.3
3	I-94	7380-XX	Indihar	2025	2.5 mi NW of Melrose (WB)	Replace Br 6897 over Sauk River	N/A	N/A	N/A	N/A	\$4.1	\$5.5	\$4.9	\$6.6
3	I-94	7380-XX	Indihar	2025	2.4 mi E of Melrose (EB)	Replace Br 6870 over Sauk River	N/A	N/A	N/A	N/A	\$4.1	\$5.5	\$4.9	\$6.6
3	I-94	8680-XX	Dumont	2025	East of Monticello west of MN 241 in St. Michael	Unbonded Overlay	N/A	N/A	N/A	N/A	\$17.9	\$24.2	\$21.5	\$29.0
3	Hwy 71	8004-XX	Schiller	2025	Elm Avenue in Wadena to Red Eye River in Sebeka	Bituminous Resurfacing	N/A	N/A	N/A	N/A	\$6.8	\$9.2	\$8.2	\$11.0
3	Hwy 23	7305-XX	Dumont	2025	West city limits Waite Park to MN 15 in St. Cloud	Bituminous Resurfacing	N/A	N/A	N/A	N/A	\$4.4	\$6.0	\$5.3	\$7.2
3	Hwy 23	7305-XX	TBD	2025	Richmond to I-94 (EB & WB)	Bituminous resurfacing	N/A	N/A	N/A	N/A	\$14.2	\$19.2	\$17.0	\$23.0
3	Hwy 25	1808-XX	TBD	2025	Morrison-Crow Wing County line to MN 210 in Brainerd	Bituminous resurfacing	N/A	N/A	N/A	N/A	\$4.1	\$5.5	\$4.9	\$6.6
3	Hwy 28	7308-XX	TBD	2025	Hwy 71 to Swannville	Bituminous resurfacing	N/A	N/A	N/A	N/A	\$7.3	\$9.9	\$8.8	\$11.9
3	Hwy 55	8607-XX	TBD	2025	MN 25 to Buffalo	Bituminous resurfacing	N/A	N/A	N/A	N/A	\$3.7	\$4.9	\$4.4	\$5.9
3	Hwy 210	1805-1806-XX	Schiller	2025	Beginning of 4-Lane west of Baxter to end of 4-Lane east of Brainerd	Bituminous Resurfacing	N/A	N/A	N/A	N/A	\$9.9	\$13.3	\$11.9	\$16.0
3	Hwy 371	1809-XX	TBD	2025	US 10 to 7 miles north of Crow Wing CR 48	Bituminous resurfacing	N/A	N/A	N/A	N/A	\$7.0	\$9.4	\$8.4	\$11.3
3	Hwy 107	5812-XX	TBD	2026	Kanabec-Pine County line to MN 23	Bituminous resurfacing	N/A	N/A	N/A	N/A	\$3.8	\$5.2	\$4.6	\$6.2
3	I-94	7380-XX	TBD	2026	Douglas-Todd County line to US 71 in Sauk Centre	Concrete pavement rehab	N/A	N/A	N/A	N/A	\$5.4	\$7.4	\$6.5	\$8.9
3	I-94	7380-XX	TBD	2026	Melrose to Albany (EB & WB)	Bituminous resurfacing	N/A	N/A	N/A	N/A	\$12.1	\$16.3	\$14.5	\$19.6
3	Hwy 10	4901-XX/0505-XX	TBD	2026	Little Falls to Half Way Crossing south of Royalton (EB & WB)	Bituminous resurfacing	N/A	N/A	N/A	N/A	\$10.2	\$13.8	\$12.2	\$16.6
3	Hwy 10	8001-XX	TBD	2026	Oriskany Joint Road in Wadena to Staples	Bituminous resurfacing	N/A	N/A	N/A	N/A	\$12.6	\$17.0	\$15.1	\$20.4
3	Hwy 64	1109-XX	Indihar	2026	MN 210 east of Motley to Jct MN 87	Bituminous Resurfacing	N/A	N/A	N/A	N/A	\$8.5	\$11.5	\$10.2	\$13.8
3	I-94	7380-XX	TBD	2027	Albany to Stearns CR 159 in Collegeville	Reclamation	N/A	N/A	N/A	N/A	\$9.7	\$13.1	\$11.6	\$15.7
3	Hwy 10	7102-XX	TBD	2027	Big Lake to Joplin Ave in Elk River	Bituminous resurfacing	N/A	N/A	N/A	N/A	\$7.3	\$9.9	\$8.8	\$11.9
3	Hwy 10	4902-XX	TBD	2027	Cushing to Little Falls	Bituminous resurfacing	N/A	N/A	N/A	N/A	\$17.0	\$23.0	\$20.4	\$27.6
3	Hwy 71	8005-XX	TBD	2027	Sebeka to Wadena-Hubbard County Line	Bituminous resurfacing	N/A	N/A	N/A	N/A	\$6.2	\$8.4	\$7.4	\$10.1
3	Hwy 169	4811-XX	TBD	2027	Milaca bypass to Mille Lacs CSAH 11	Bituminous resurfacing	N/A	N/A	N/A	N/A	\$8.0	\$10.8	\$9.6	\$13.0
3	Hwy 6	1801-XX	TBD	2027	MN 18 to MN 210 in Deerwood	Bituminous resurfacing	N/A	N/A	N/A	N/A	\$3.9	\$5.3	\$4.7	\$6.4
3	Hwy 23	0504-XX	TBD	2027	Foley	Urban Reconstruction	N/A	N/A	N/A	N/A	\$3.8	\$5.2	\$4.6	\$6.2
3	Hwy 47	3001-XX	TBD	2027	Isanti-Anoka County line to MN 95	Bituminous resurfacing	N/A	N/A	N/A	N/A	\$5.4	\$7.4	\$6.5	\$8.9
3	Hwy 95	0505-XX	TBD	2027	MN 23 east of St. Cloud to Benton-Mille Lacs County line	Reclamation	N/A	N/A	N/A	N/A	\$8.2	\$11.1	\$9.8	\$13.3
3	Hwy 210	7701-XX	TBD	2027	Hewitt to US 10 in Staples	Bituminous resurfacing	N/A	N/A	N/A	N/A	\$8.1	\$10.9	\$9.7	\$13.1
3	Hwy 371	1810-XX	TBD	2027	MN 210 in Baxter to Nisswa	Reclamation	N/A	N/A	N/A	N/A	\$11.6	\$15.6	\$13.9	\$18.7
4	Hwy 28	7503-38	Brian Bausman	2022	Chokio to Morris	Medium mill and overlay	Pending approval	Pending approval	Pending approval	Pending approval	\$4.1	\$6.2	\$5.3	\$8.1

# Major Highway Projects (Planned 2021-2032)

District	Route	S.P.	Assigned Project Manager	Year	Location	Description	Environmental Document Status	Municipal Consent Status	Geometric Layout Approval Status	Construction Limits Status	Construction Letting Cost Estimate (in Millions)	Total Project Cost Estimate (in Millions)	
	4	Hwy 9	8409-26	Tom Lundberg	2022	Ramsville to Breckenridge	Medium mill and overlay	Pending approval	Pending approval	Pending approval	Pending approval	\$8.0 - \$12.0	\$10.4 - \$15.6
	4	I94WB	5680-144	Justin Knopf	2022	WEST OF THE WILKIN/OTTNER TAIL COUNTY LINE TO WEST OF US 59	CONCRETE PAVEMENT REHABILITATION	Pending approval	Pending approval	Pending approval	Pending approval	\$7.8 - \$11.5	\$10.1 - \$15.0
	4	I94EB	8400-42	Tom Lundberg	2023	WEST OF MN108 TO WEST OF CSAH 11	UNBONDED CONCRETE OVERLAY	Pending approval	Pending approval	Pending approval	Pending approval	\$7.8 - \$11.5	\$10.1 - \$15.0
	4	Hwy 55	8404-47	Brian Bausman	2023	SD Border to Grant/Wilkin Co Line	Medium mill and overlay	Pending approval	Pending approval	Pending approval	Pending approval	\$7.2 - \$10.8	\$9.4 - \$14.0
	4	Hwy 55	2609-28	Tom Pace	2024	Elbow Lake to Barrett	Reclaim, shoulder widening	Pending approval	Pending approval	Pending approval	Pending approval	\$6.9 - \$10.2	\$9.0 - \$13.3
	4	I94WB	2180-118	Lori Vanderhider	2024	Hwy 114 to Hwy 29	Unbonded Concrete Overlay	Pending approval	Pending approval	Pending approval	Pending approval	\$7.8 - \$11.5	\$10.1 - \$15.0
	4	Hwy 34	0303-67	Tom Lundberg	2023	Hwy 225 to E Becker Co Line	Reclaim and Widen Shoulders	Pending approval	Pending approval	Pending approval	Pending approval	\$4.6 - \$6.8	\$6.0 - \$8.8
	4	Hwy 10	1401-180	Not assigned	2024	EAST OF US 75 IN MOORHEAD TO 220TH ST	Medium mill and overlay	Pending approval	Pending approval	Pending approval	Pending approval	\$9.1 - \$13.3	\$11.8 - \$17.3
	4	Hwy 28	6102-25	Justin Knopf	2024	Pomme de Terre Bridge to Starbuck	Medium mill and overlay	Pending approval	Pending approval	Pending approval	Pending approval	\$6.7 - \$10.1	\$8.7 - \$13.1
	4	Hwy75	7806-32	Brian Bausman	2024	N end of Br 78006 in Wheaton to RR North of Hwy 55	Medium mill and overlay	Pending approval	Pending approval	Pending approval	Pending approval	\$5.4 - \$8.0	\$7.0 - \$10.4
	4	Hwy 9	1409-27	Justin Knopf	2024	1 Mile North of I-94 to Hwy 10	Bituminous Reclaim	Pending approval	Pending approval	Pending approval	Pending approval	\$7.4 - \$10.9	\$9.6 - \$14.2
	4	Hwy 75/10	1406-76	Tom Lundberg	2025	ON US 75, FROM N. OF 24TH AVE. S. TO US 10 (MAIN AVE.), ON US 10, FROM RED RIVER TO E. W. OF TH 106 TO WADENA/OTTNER TAIL COUNTY LINE	Reconstruct	Pending approval	Pending approval	Pending approval	Pending approval	\$25.5 - \$37.5	\$33.2 - \$48.8
	4	Hwy 10	5605-23	Not assigned	2025	CSAH 10 to 6 miles E of perham (NE end of Br over RR)	Medium mill and overlay	Pending approval	Pending approval	Pending approval	Pending approval	\$4.4 - \$6.5	\$5.7 - \$8.5
	4	Hwy 10 EB	5607-43	Lori Vanderhider	2025	CSAH 10 to 6 miles E of perham (NE end of Br over RR)	Thick mill and overlay	Pending approval	Pending approval	Pending approval	Pending approval	\$8.6 - \$12.6	\$11.2 - \$16.4
	4	Hwy 59	2610-12	Justin Knopf	2025	South Grant County Line to Hwy 55 in Barrett	Concrete Rehabilitation	Pending approval	Pending approval	Pending approval	Pending approval	\$5.7 - \$8.5	\$7.4 - \$11.1
	4	Hwy 59	5617-31	Not assigned	2025	0.3 Miles North of I-94 to 4th Avenue in Pelican Rapids	Thick mill and overlay	Pending approval	Pending approval	Pending approval	Pending approval	\$8.8 - \$13.0	\$11.4 - \$16.9
	4	Hwy 34	NA	Tom Lundberg	2025	0.2 Miles East of CSAH 29 to Pansford Road	Thick mill and overlay	Pending approval	Pending approval	Pending approval	Pending approval	\$9.9 - \$14.8	\$12.9 - \$19.2
	4	Hwy 27	NA	Tom Pace	2025	South Junction Hwy 75 in Wheaton to 1.1 Miles East of CSAH 7	Medium mill and overlay	Pending approval	Pending approval	Pending approval	Pending approval	\$10.5 - \$15.5	\$13.7 - \$20.2
	4	Hwy 10EB	NA	Not assigned	2026	14TH STREET IN MOORHEAD TO CSAH 31	Medium mill and overlay	Pending approval	Pending approval	Pending approval	Pending approval	\$10.2 - \$14.9	\$13.3 - \$19.4
	4	I94EB	NA	Tom Lundberg	2026	.56 Mi E. of ND State line to .3 Mi E. of CSAH 11A	Reconstruct	Pending approval	Pending approval	Pending approval	Pending approval	\$9.9 - \$14.5	\$12.9 - \$18.9
	4	Hwy 210	NA	Tom Pace	2026	TH 29 to 02 Miles W of US 71	Medium mill and overlay	Pending approval	Pending approval	Pending approval	Pending approval	\$4.3 - \$6.3	\$5.6 - \$8.2
	4	I94EB	NA	Lori Vanderhider	2027	0.4 Miles E. of Grant Co. Line to jct. MN 79	Concrete Rehabilitation including shoulder	Pending approval	Pending approval	Pending approval	Pending approval	\$8.3 - \$12.2	\$10.8 - \$15.9
	4	I94WB	NA	Lori Vanderhider	2027	1.5 Miles W of TH 108 to 0.1 Miles W of US 59	Concrete Rehabilitation including shoulder	Pending approval	Pending approval	Pending approval	Pending approval	\$11.1 - \$16.4	\$14.4 - \$21.3
	4	MN29	XXXX-XX	Not assigned	2027	50TH AVE IN ALEXANDRIA TO 0.1M N OF MCKAY AVE	Concrete Rehabilitation	Pending approval	Pending approval	Pending approval	Pending approval	\$5.3 - \$7.8	\$6.9 - \$10.1
	4	I94WB	XXXX-XX	Not assigned	2028	0.4 W OF MN29 TO BECKER/DOUGLAS COUNTY LINE	Unbonded Concrete Overlay	Pending approval	Pending approval	Pending approval	Pending approval	\$17.9 - \$26.3	\$23.3 - \$34.2
	4	I94WB	XXXX-XX	Not assigned	2028	0.565 E. STATE LINE TO 0.3 E OF MN336	Reconstruct	Pending approval	Pending approval	Pending approval	Pending approval	\$8.2 - \$12.1	\$10.7 - \$15.7
	6	65	2405-22	HEATHER LUKES	2021	FROM NEWTON AVE TO I-35 RAMP IN ALBERT LEA	REPAVING PLUS ADA IMPROVEMENTS AND STORM SEWER REPAIR	TBD	TBD	TBD	TBD	\$4.1	\$5.1
	6	90	8826-165	RICHARD AUGUSTIN	2021	I-90 ON WESTBOUND LANES DISTRICTWIDE	FIXING BRIDGES	N/A	NOT NEEDED	NOT NEEDED	NOT NEEDED	\$5.6	\$6.8
	6	52	2506-77	CHAD HANSON	2021	HWY 52, SB LANES FROM 1.2 MI N CSAH 7 TO 2.2 MI S MN 19	RECONSTRUCT AND HADER INTERCHANGE	PENDING	PENDING	PENDING	PENDING	\$43.9	\$51.1
	6	52	2505-XX	CHAD HANSON	2021	HWY 52, IN ZUMBERTA	REPLACE BRIDGES 9659, 9660 AND MAKE INTERCHANGE IMPROVEMENTS	PENDING	PENDING	PENDING	PENDING	\$10.4	\$12.2
	6	218	5009-34	JAI KALSY	2021	HWY 218 OVER I-90	REPLACE BRIDGES 50803 AND 50804					\$8.5	\$10.9
	6	105	5007-34	HEATHER LUKES	2021	HWY 105 FROM IA STATE LINE TO 11 MI N IN MOWER COUNTY	REPAVING	N/A	N/A	N/A	N/A	\$4.3	\$5.4
	6	90	2482-77	PAUL ZAGER	2022	I-90 EASTBOUND LANES FROM FREEDORN COUNTY ROAD 46 NEAR PETRAN TO HWY 105	REPAVING	PENDING	NOT NEEDED	PENDING	PENDING	\$14.5	\$18.5
	6	61	7904-44	HEATHER LUKES	2022	HWY 61 SOUTHBOUND LANES FROM HWY 248 IN WINONA COUNTY TO HWY 60 IN WABASHA	REPAVING	N/A	N/A	N/A	N/A	\$12.3	\$15.3
	6	43	8503-53	KYLE LAKE	2022	HWY 43 FROM HWY 61 IN WINONA TO MANKATO AVE/SARNIA AVE JUNCTION	RECONSTRUCT ALL LANES	PENDING	NEED UNKNOWN	PENDING	PENDING	\$9.5	\$11.6
	6	60	7902-25	HEATHER LUKES	2022	HWY 60 FROM HWY 52 TO HWY 63 NEAR ZUMBERTA FALLS	REPAVING AND ADA IMPROVEMENTS	N/A	N/A	N/A	N/A	\$8.1	\$9.1
	6	250	2319-20	AARON BREYFOGLE	2022	HWY 250 FROM HWY 56 TO HWY 30 IN FILLMORE COUNTY	REPAVING	PENDING	NOT NEEDED	NOT NEEDED	PENDING	\$4.2	\$5.5
	6	30	2305-29	RICHARD AUGUSTIN	2022	HWY 30 FROM HWY 74 TO HWY 43 JUNCTION NEAR RUSHFORD IN FILLMORE COUNTY	REPAVING	N/A	N/A	N/A	N/A	\$8.2	\$9.6
	6	30	5505-27	AARON BREYFOGLE	2022	HWY 30 OVER N BRANCH ROOT RIVER	REPLACE BRIDGE 9008 AND BRIDGE 9009	PENDING	NOT NEEDED	PENDING	PENDING	\$5.7	\$6.9
	6	35	NEW	TBD	2023	I-35 FROM RICE COUNTY ROAD 48 TO HWY 21	REPAVING ALL LANES	N/A	N/A	N/A	N/A	\$12.7	\$16.2
	6	90	NEW	TBD	2023	I-90 FROM EAST OF MOWER COUNTY ROAD 1 TO EAST OF HWY 63	REPAVING	N/A	N/A	N/A	N/A	\$4.1	\$5.2
	6	61	NEW	TBD	2023	HWY 61 FROM ONE MILE NORTH OF LAKE CITY TO READY MIX ENTRANCE IN RED WING	REPAVING	N/A	N/A	N/A	N/A	\$4.4	\$5.7
	6	218	NEW	TBD	2023	HWY 218 FROM 0.5 MI S JCT TH 30 TO 5 JCT TH 30 (BLOOMING PRAIRIE)	RECONSTRUCT	N/A	N/A	N/A	N/A	\$6.2	\$8.0
	6	218	7408-90	HEATHER LUKES	2023	HWY 218 FROM HWY 30 NEAR BLOOMING PRAIRIE TO HWY 14 NEAR OWATONNA	REPAVING	N/A	N/A	N/A	N/A	\$6.8	\$8.7
	6	90	5080-170	JAI KALSY	2023	I-90 AUSTIN DESIGN BUILD	REPLACE 4 BRIDGES AND REHABILITATE 3 BRIDGES	N/A	N/A	N/A	N/A	\$30.0	\$38.9
	6	19	6602-30	TBD	2023	HWY 19 FROM HWY 13 TO HWY 3 IN RICE COUNTY	REPAVING	N/A	N/A	N/A	N/A	\$10.2	\$13.0
	6	43	NEW	TBD	2023	HWY 43 FROM HWY 44 NEAR MABEL TO HWY 16 JUNCTION NEAR RUSHFORD IN FILLMORE	REPAVING	N/A	N/A	N/A	N/A	\$9.8	\$12.6
	6	251	NEW	TBD	2023	HWY 251 FROM I-35 TO HWY 218	REPAVING	N/A	N/A	N/A	N/A	\$7.7	?
	6	90	NEW	TBD	2024	I-90 FROM ALDEN TO HWAY 13	REPAVING	N/A	N/A	N/A	N/A	\$14.8	\$19.0
	6	16	NEW	TBD	2024	HWY 16 FROM TRACEY ROAD (SPRING VALLEY) TO E GRISWOLD ST	RECONSTRUCTION	N/A	N/A	N/A	N/A	\$6.3	\$8.2
	6	30	NEW	TBD	2024	HWY 30 FROM HWY 63 NEAR STEWARTVILLE TO HWY 52 NEAR CHATELAIN IN OLUSTON COUNTY	REPAVING	N/A	N/A	N/A	N/A	\$7.7	\$9.8
	6	246	NEW	TBD	2024	HWY 246 FROM HWY 3 TO NENSTRAND	REPAVING	N/A	N/A	N/A	N/A	\$6.0	\$7.7
	6	35	NEW	TBD	2025	I-35 FROM IOWA BORDER TO HWY 30	REHABILITATE CONCRETE PAVEMENT ON ALL LANES	N/A	N/A	N/A	N/A	\$14.5	\$18.6
	6	90	NEW	TBD	2025	I-90 FROM WINONA COUNTY ROAD 12 TO HWY 61 NEAR DAKOTA	REPAVING ALL LANES	N/A	N/A	N/A	N/A	\$4.8	\$6.2
	6	52	NEW	TBD	2025	HWY 52 FROM HWY 80 TO FILLMORE COUNTY ROAD 5	REPAVING	N/A	N/A	N/A	N/A	\$4.3	\$5.5
	6	61	2514-121	TBD	2025	HWY 61 OVER HAY CREEK AND WITHERS HARBOR DRIVE AND OVER ABANDONED	REPLACE BRIDGE 6483 AND PLUG BRIDGE 6482	NOT NEEDED	PENDING	PENDING	Oct-17	\$7.5	\$9.6
	6	218	NEW	TBD	2025	HWY 218 FROM IOWA BORDER TO EAST OF I-90 JUNCTION IN MOWER COUNTY	REPAVING	N/A	N/A	N/A	N/A	\$6.2	\$7.9
	6	13	NEW	TBD	2025	HWY 13 FROM HWY 69 TO HWY 30	REPAVING	N/A	N/A	N/A	N/A	\$7.8	\$10.0
	6	44	NEW	TBD	2025	HWY 44 FROM HOUSTON COUNTY ROAD 12 TO HOKAM	REPAVING	N/A	N/A	N/A	N/A	\$6.5	\$8.3



# Major Highway Projects (Planned 2021-2032)

District	Route	S.P.	Assigned Project Manager	Year	Location	Description	Environmental Document Status	Municipal Consent Status	Geometric Layout Approval Status	Construction Limits Status	Construction Letting Cost Estimate (in Millions)	Total Project Cost Estimate (in Millions)		
8	Hwy 59	4209-26	TBD	2024	CSAH 33, just north of Marshall to Yellow Medicine County CSAH 3	3" mill and overlay	Not started	Not started	Not started	Not started	\$7.6	\$9.2	\$9.1	\$11.0
8	Hwy 68	8709-XX	TBD	2025	Canby to Minnesota	3" mill & overlay	Not started	Not started	Not started	Not started	\$5.9			
8	Hwy 19	4205-XX	TBD	2025	Marshall	Urban Reconstruction	Not started	Not started	Not started	Not started	\$9.6	\$12.6	\$11.7	\$15.4
8	Hwy 4	4701-XX	TBD	2026	Cosmos to 0.5 miles N. of TWP 243/451	Reclaim & Overlay	Not started	Not started	Not started	Not started	\$6.4		NA	
8	Hwy 7	4302-XX	TBD	2026	Silver Lake to MN 25	Medium mill & overlay	Not started	Not started	Not started	Not started	\$8.0		NA	
8	Hwy 4	6502-XX	TBD	2027	Fairfax to Hector	Reclaim & Overlay	Not started	Not started	Not started	Not started	\$10.8		NA	
8	Hwy 7	1201-XX	TBD	2027	MN 40 to MN 55	Reclaim & Overlay	Not started	Not started	Not started	Not started	\$10.9		NA	
8	Hwy 59	4209-26	TBD	2027	CSAH 33 to CSAH 3	3" mill and overlay	Not started	Not started	Not started	Not started	\$7.2		NA	
8	Hwy 68	6408-XX	TBD	2027	N. Jct US 71 to Morgan	Medium mill & overlay	Not started	Not started	Not started	Not started	\$5.0		NA	
8	Hwy 71	3414-XX	TBD	2027	MN 9 to MN 55	Reclaim & Overlay	Not started	Not started	Not started	Not started	\$6.1		NA	
8	Hwy 71	6508-XX	TBD	2027	0.6 miles N. of E. Jct MN 19 to Olivia	Reclaim & Overlay	Not started	Not started	Not started	Not started	\$11.2		NA	
M	Hwy 36	8204-77	Dale Gade	2022	Ramsey, Washington	MILL AND OVERLAY, RECLAIM, FROM I-35W TO STILLWATER (GRELLEY AVE)	Not known	Not known	Not known	Not known	\$39.7	\$47.6	\$46.8	\$56.2
M	Hwy 55	2724-124	Christian Hoberg	2022	Hennepin	REHAB BRIDGE #27849, HWY 55 EB/I-35W & RAMP AT JCT HWY 55 & I-35W	Not known	Not known	Not known	Not known	\$10.7	\$12.8	\$12.6	\$15.2
M	Hwy 55	2724-XXX	Christian Hoberg	2022	Hennepin	PAVEMENT REPAIR, FROM 13TH AVE TO HWY 62	Not known	Not known	Not known	Not known	\$10.0	\$12.0	\$11.8	\$14.2
M	Hwy 65	0207-110	Mike Kruse	2022	Anoka	MILL AND OVERLAY, FROM COUNTY RD 10 TO 153RD AVE	Not known	Not known	Not known	Not known	\$15.7	\$18.8	\$18.5	\$22.2
M	Hwy 7	2706-239	Victor Vasas	2022	Hennepin	RECLAIM, ST. BONIFACIUS TO CHRISTMAS LAKE RD	Not known	Not known	Not known	Not known	\$10.0	\$12.0	\$11.8	\$14.2
M	I-494	2785-424	Ken Sama	2022	Hennepin	CONCRETE PAVEMENT REPAIR, FROM FRANCE AVE TO EXIT 198/WB US 12	Not known	Not known	Not known	Not known	\$12.5	\$15.0	\$14.8	\$17.7
M	I-35W	N/A	Brian Isaacson	2022-2023	Hennepin/Ramsey	REDECK BRIDGE #27831, I-394 OVER DUNWOODY BLVD	Not known	Not known	Not known	Not known	\$100.0	\$120.0	\$118.0	\$141.6
M	Hwy 120	6227-86	Ryan Coddington	2023	Ramsey, Washington	PAVEMENT RECONSTRUCTION, 4TH ST TO HWY 244	Not known	Not known	Not known	Not known	\$10.3	\$12.4	\$12.2	\$14.6
M	Hwy 212	1013-97	Nicole Peterson	2023	Carver County	CONCRETE PAVEMENT REPAIR/MILL AND OVERLAY, CSAH 134 TO CHASKA BYPASS	Not known	Not known	Not known	Not known	\$18.5	\$22.2	\$21.8	\$26.2
M	Hwy 50	N/A	Nicole Peterson	2023	Dakota	PAVEMENT RECLAIM/WHITETOPPING, FROM HWY 52 TO HWY 61	Not known	Not known	Not known	Not known	\$14.5	\$17.4	\$17.1	\$20.5
M	Hwy 52	N/A	Not assigned	2023	Dakota	UNBONDED CONCRETE OVERLAY, FROM CR 86 TO CSAH 42	Not known	Not known	Not known	Not known	\$40.0	\$48.0	\$47.2	\$56.6
M	Hwy 55	1909-99	Carolyn Adamson	2023	Dakota	REDECK BRIDGE #19819 (HWY 55 OVER I-35E), BRIDGE #19827 (HWY 55 OVER I-494)	Not known	Not known	Not known	Not known	\$10.0	\$12.0	\$11.8	\$14.2
M	I-35W	N/A	Not assigned	2023	Hennepin, Dakota	I-94 MNPASS, ST PAUL TO MINNEAPOLIS	Not known	Not known	Not known	Not known	\$15.0	\$18.0	\$17.7	\$21.2
M	I-94	N/A	Ryan Coddington	2023-2024	Washington	UNBONDED CONCRETE OVERLAY FROM HWY 120 TO WISCONSIN BORDER, 2 YEAR PROJECT	Not known	Not known	Not known	Not known	\$107.9	\$129.5	\$127.3	\$152.8
M	Hwy 10	N/A	Not assigned	2024	Anoka	MILL AND OVERLAY, FROM CLEVELAND/JARVIS TO FAIRGAK	Not known	Not known	Not known	Not known	\$12.0	\$14.4	\$14.2	\$17.0
M	Hwy 100	2734-XX	Not assigned	2024	Hennepin	MILL AND OVERLAY, UNDER PED BR/EXIT CEDAR LK RD TO I-694	Not known	Not known	Not known	Not known	\$24.0	\$28.8	\$28.3	\$34.0
M	Hwy 169	N/A	Not assigned	2024	Scott	CONCRETE PAVEMENT REPAIR, FROM HWY 21 TO CSAH 15	Not known	Not known	Not known	Not known	\$13.0	\$15.6	\$15.3	\$18.4
M	Hwy 5	6201-91	Mark Lindeberg	2024	Ramsey	RECONSTRUCTION/MILL AND OVERLAY, MUNSTER AVE TO KELLOGG BLVD	Not known	Not known	Not known	Not known	\$14.0	\$16.8	\$16.5	\$19.8
M	Hwy 5	N/A	Not assigned	2024	Carver	CONCRETE PAVEMENT REPAIR, FROM HWY 41 TO CSAH 4	Not known	Not known	Not known	Not known	\$12.5	\$15.0	\$14.8	\$17.7
M	Hwy 55	N/A	Not assigned	2024	Dakota	CONCRETE PAVEMENT REPAIR/MILL AND OVERLAY, FROM BLOOMINGTON RD TO ARGENT	Not known	Not known	Not known	Not known	\$12.0	\$14.4	\$14.2	\$17.0
M	Hwy 65	N/A	Not assigned	2024	Hennepin	CONCRETE PAVEMENT REPAIR, FROM 153RD AVE TO 217TH AVE	Not known	Not known	Not known	Not known	\$20.0	\$24.0	\$23.6	\$28.3
M	I-694	N/A	Not assigned	2024	Ramsey	UNBONDED CONCRETE OVERLAY, FROM HWY 21 TO CR 81	Not known	Not known	Not known	Not known	\$23.0	\$27.6	\$27.1	\$32.6
M	Hwy 12	N/A	Not assigned	2025	Hennepin	CONCRETE PAVEMENT REPAIR/MILL AND OVERLAY, WAYZATA EXIT TO I-494	Not known	Not known	Not known	Not known	\$12.0	\$14.4	\$14.2	\$17.0
M	Hwy 47	N/A	Not assigned	2025	Anoka	MILL AND OVERLAY, BUNKER LK BLVD TO ANOKA/SANTI COUNTY LINE	Not known	Not known	Not known	Not known	\$11.7	\$14.0	\$13.8	\$16.6
M	Hwy 61	6221-107	Mark Lindeberg	2025	Dakota	UNBONDED CONCRETE OVERLAY, HWY 316 TO W 36TH ST IN HASTINGS	Not known	Not known	Not known	Not known	\$10.8	\$13.0	\$12.7	\$15.3
M	Hwy 62	N/A	Not assigned	2025	Hennepin	RECONSTRUCT PAVEMENT, TRACY AVE BRIDGE TO UNDER PENN AVE BRIDGE	Not known	Not known	Not known	Not known	\$28.5	\$34.2	\$33.6	\$40.4
M	Hwy 7	2704-XX	Not assigned	2025	Hennepin	MILL AND OVERLAY, FROM CSAH 23 TO HWY 13	Not known	Not known	Not known	Not known	\$18.0	\$21.6	\$21.2	\$25.5
M	I-35E	N/A	Not assigned	2025	Dakota	MILL AND OVERLAY/PAVEMENT REPLACEMENT, FROM SHEPARD RD TO 10TH ST BRIDGE	Not known	Not known	Not known	Not known	\$18.5	\$22.2	\$21.8	\$26.2
M	I-494	N/A	Not assigned	2025	Hennepin	MILL AND OVERLAY, FROM E DUPONT TO I-35W	Not known	Not known	Not known	Not known	\$21.5	\$25.8	\$25.4	\$30.4
M	Hwy 10	N/A	Not assigned	2026	Anoka	UNBONDED CONCRETE OVERLAY, HWY 65 TO I-35W	Not known	Not known	Not known	Not known	\$17.8	\$21.4	\$21.0	\$25.2
M	Hwy 212	N/A	Not assigned	2026	Hennepin	CONCRETE PAVEMENT REPAIR/MILL AND OVERLAY, FROM CSAH 4 TO HWY 62	Not known	Not known	Not known	Not known	\$10.8	\$13.0	\$12.7	\$15.3
M	Hwy 52	N/A	Not assigned	2026	Dakota	UNBONDED CONCRETE OVERLAY/MILL AND OVERLAY, FROM CLAYTON TO HWY 55	Not known	Not known	Not known	Not known	\$19.1	\$22.9	\$22.5	\$27.0
M	Hwy 55	N/A	Not assigned	2026	Hennepin	MILL AND OVERLAY/RECLAIM, FROM I-494 TO GENERAL MILLS BLVD	Not known	Not known	Not known	Not known	\$12.9	\$15.5	\$15.2	\$18.3
M	Hwy 95	N/A	Not assigned	2026	Chicago	RECLAIM/MILL AND OVERLAY, FROM I-35 TO HWY 95	Not known	Not known	Not known	Not known	\$10.0	\$12.0	\$11.8	\$14.2
M	Hwy 97	N/A	Not assigned	2026	Washington	CONCRETE PAVEMENT REPAIR/MILL AND OVERLAY, FROM PORTLAND AVE TO WASHINGTON AVE	Not known	Not known	Not known	Not known	\$12.7	\$15.2	\$15.0	\$18.0
M	I-94	N/A	Not assigned	2026	Hennepin	MILL AND OVERLAY, HWY 280 TO WESTERN AVE	Not known	Not known	Not known	Not known	\$75.0	\$90.0	\$88.5	\$106.2
M	I-394	N/A	Not assigned	2026-2027	Hennepin	MILL AND OVERLAY, 24TH AVE S TO FRANCE AVE	Not known	Not known	Not known	Not known	\$55.8	\$67.0	\$65.8	\$79.0
M	Hwy 169	N/A	Not assigned	2027	Scott	CONCRETE PAVEMENT REPAIR, CSAH 15 TO BLOOMINGTON FERRY BR	Not known	Not known	Not known	Not known	\$17.0	\$20.4	\$20.1	\$24.1
M	Hwy 252	N/A	Not assigned	2027	Hennepin	CONCRETE PAVEMENT REPAIR/MILL AND OVERLAY, I-94 TO 85TH	Not known	Not known	Not known	Not known	\$10.9	\$13.1	\$12.9	\$15.4
M	Hwy 65	N/A	Not assigned	2027	Hennepin/Anoka	MILL AND OVERLAY, END OF BRIDGE #2440 TO 53RD AVE NE	Not known	Not known	Not known	Not known	\$11.0	\$13.2	\$13.0	\$15.6
M	Hwy 77	N/A	Not assigned	2027	Dakota	MILL AND OVERLAY, FROM HWY 47 TO HWY 8	Not known	Not known	Not known	Not known	\$12.8	\$15.4	\$15.1	\$18.1
M	I-35W	N/A	Not assigned	2027	Hennepin	CONCRETE PAVEMENT REPAIR, FROM I-35W/I-35E SPLIT TO HWY 77	Not known	Not known	Not known	Not known	\$14.2	\$17.0	\$16.8	\$20.1
M	I-35E	N/A	Not assigned	2027	Ramsey	MILL AND OVERLAY, FROM BURNSVILLE PKWY TO 76TH ST	Not known	Not known	Not known	Not known	\$12.1	\$14.5	\$14.3	\$17.1
M	I-494	N/A	Not assigned	2027	Hennepin	PAVEMENT REPLACEMENT, (I-94/I-694) BROOKLYN BLVD BRIDGE TO HUMBOLDT AVE	Not known	Not known	Not known	Not known	\$15.8	\$19.0	\$18.6	\$22.4
M	I-94	N/A	Not assigned	2027	Ramsey	MILL AND OVERLAY, MN 280 TO WESTERN AVE	Not known	Not known	Not known	Not known	\$18.2	\$21.8	\$21.5	\$25.8